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### CLASS 52, STATIC STRUCTURES (E.G., BUILD-INGS)

#### **SECTION I - CLASS DEFINITION**

This is the residual class for static structures. It includes on site erected structures generally identified by terms such as: civil engineering, public works, shelter, housing, buildings or masts and other related components used in such structures, e.g., panels, beams, columns. etc. Also, included are selected structurally similar components, such as, table top panels, poles, posts, window sash elements or door panels even though not disclosed as specialized as components of a building structure. Also, are included processes, machines and implements used in the construction of such structures which are not elsewhere provided for.

### SECTION II - SUBCLASS REFERENCES TO THE CURRENT CLASS

#### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 27, see the (1) Note, for exemplary classes and subclasses that provide for an article or article support installed in means forming an enclosure or part thereof.
- 198, see the search class reference to Class 454 for a ventilating structure with air directing or controlling features other than mere windows.
- 204.1, for a structure having defined structure outlining a passageway which traverses a barrier (e.g., wall), said passageway is designed for a means which allows access of light, air, people, or a pet and see the attached search notes to this subclass definition.

### SECTION III - REFERENCES TO OTHER CLASSES

- 14, Bridges, appropriate subclasses for nonmasonry or nonconcrete static structure specialized to carrying traffic across a space between supports.
- 34, Drying and Gas or Vapor Contact With Solids, appropriate subclasses, particularly subclasses 201+ for houses and kilns having means for drying and/or gas or vapor contact with solids, and subclass 237 for reticulated floors for distributing a drying medium.

- 47, Plant Husbandry, for buildings having features specialized to the care, treatment and support of the growth of plants.
  - Movable or Removable Closures, for closure panels mounted for movement or removal including support means for such closures having features providing for such movement or removal of a closure panel. This class (52) takes panels, per se, (1) even though defined as doors or windows, (2) structure defining an opening through a barrier, (3) structure having a feature for movement or removal of a panel section for purposes of repair or assembly or disassembly, (4) a transparent panel (window) with means to treat the panel not elsewhere provided for and (5) a building or barrier with a movable closure and having an additional feature other than one merely forming an enclosure or support for the movable closure. See Subclass References to Current Class, above, regarding a structure having defined structure outlining a passageway which traverses a barrier (e.g., wall).
- 105, Railway Rolling Stock, appropriate subclass, for a vehicle specialized to use as railway rolling stock, particularly subclass 375 and 422 for floors, and subclasses 396+ for car framing and structure. In general, structure forming a boxlike enclosure of general application is in Class 52, even though defined as a "vehicle body" or the like. Also a vehicle body with a feature for conversion from a vehicle to a static structure is also in Class 52, e.g., a vehicle with ground engaging braces or guys.
- 109, Safes, Bank Protection, or a Related Device, appropriate subclasses, for a static structure of a building combined with devices provided for in Class 109, i.e., means resisting attack which do more than merely contribute to structural strength, particularly subclasses 78+ for wall structure with specific penetration resistant features.
- 110, Furnaces, appropriate subclasses for furnace structure with features specialized to furnace operation, e.g., subclasses 297+ for a furnace provided with fluid supply structure; subclass 308 for fluid heater wall structure; subclasses 331+ for furnace arch or roof structure; subclasses 336+ for furnace wall structure; and subclasses 338+ for furnace brick structure. The mere recitation of a refractory, coated or oxidizably coated refractory, is not considered a recitation of a feature specialized to furnace

- operation. See the search notes to other classes in References to Other Classes, herein.
- 114, Ships, particularly subclasses 65+ for a structure specialized to a ship and see the search note for Railway Rolling Stock, in References to Other Classes, herein.
- 119, Animal Husbandry, subclass 301, 302+, 311+, 329+, 400+, and 416+ for enclosures having significant structure or combined with a feature for that class.
- 122, Liquid Heaters and Vaporizers, subclass 6 and 494 for furnace structure combined with tubes for liquid to be heated.
- 126, Stoves and Furnaces, appropriate subclasses for a structure with features peculiar to that class, particularly subclasses 144+ for fire pots and linings, and see the search note for Furnaces, in References to Other Classes, herein.
- 135, Tent, Canopy, Umbrella, or Cane. The line is: Class 52 takes: (1) structures which are strengthened or shaped by fluid pressure (see subclass 2.11), (2) an in situ erected enclosure or shelter having as a component thereof a rigidly framed prefabricated panel even though it may have flexible surfacing (see subclass 63) and (3) certain covers which are entirely supported by an article or pile of material (see subclasses 3+) and (4) other in situ erected type rigid buildings. Class 135 takes other portable covers, or shelters surfaced with flaccid material, whether hand or earth supported.
- 138. Pipes and Tubular Conduits. The line between Class 52 and Class 138 is: Class 52 takes rigid tubular structures specialized to use as or in an in situ erected static structure, e.g., (1) a tubular structure of like components (modules) juxtaposed in an axial direction, (2) a curved segment, e.g., a curved cast arch or a curved module per se, (3) a module having intersecting passages, (4) a module having a through passage and a joint forming feature on at least one end surface intersecting said passage, (5) a tubular structure with means projecting from the wall thereof having a rigidifying function other than merely forming the tube, e.g., a tube with means to support a structural component or (6) an open-work load-bearing tube such as a box girder, mast, etc. Class 138 takes a tubular structure of more general application, e.g., (1) a tubular structure forming a clear through passage which is only defined by a cross-section normal to a longitudinal axis, (2) a flexible (nonrigid) tubular structure or (3) a tubular structure having reinforcement generally con-

- forming to and embedded in or applied to the wall thereof to increase the strength of the tube rather than to adapt it for use as a load-bearing component of a building component.
- 160, Flexible or Portable Closure, Partition, or Panel. The line is: Class 160, takes: (a) Closures and other panel units utilizing flexible sheet material or fabrics to constitute the panel portion. (b) Closures and panel units made of plural strips, slabs or panels interconnected with one another for relative motion. (c) Closures and panel units of either or both types (a) and (b) combined with closures or panel units of other types. Class 52 takes: (1) rigid panels or (2) plural panels with a flexible section forming an enclosure. As to (a) above, the subject matter, if claimed generically or defining Class 160 subject matter, is placed in Class 160
- 165, Heat Exchange, subclasses 53+ for a heat exchanger related to a wall, ceiling or floor which heat exchanger is defined as more than a mere heating or cooling duct within a barrier.
- 174, Electricity: Conductors and Insulators, appropriate subclass for a pole, post or anti-inductive shield, e.g., building having defined a feature specialized to such use, e.g., conductor, insulator or means supporting it or a barrier or enclosure having means forming a conductive path between components, particularly subclasses 35+ for anti-inductive shields.
- 181, Acoustics, particularly subclass 30 and 284+ for a panel having a physical configuration or relationship of components, peculiar to the attenuation of sound. This class takes such a panel combined with an additional feature for a static building structure, e.g., means for mounting them to form an enclosure or barrier.
- 182, Fire Escape, Ladder, or Scaffold, for (1) ladder, i.e., stairs without risers except helical stairs, (2) ladder or scaffold attached to a building where only sufficient structure to attach the ladder or scaffold is defined, (3) ladder, scaffold or tower with a platform which in use is intended to support a person and (4) structure with additional features specialized to escaping from a building.
- 202, Distillation: Apparatus, subclasses 222+ for structural features peculiar to a thermolytic distillation retort.
- 220, Receptacles, appropriate subclasses for a portable type container especially subclasses 1.5+, 3.2+, 216, 484, 565+, and 581+ and also other

- containers made of other materials not specifically provided for in other container classes.
- 238, Railways: Surface Track, subclasses 84+ for a plastic, e.g., concrete, railway tie.
- 244, Aeronautics, subclasses 117+ for an aircraft structure having a defined feature specialized to Class 244 and see the search note for Railway Rolling Stock, in References to Other Classes, herein.
- 249, Static Molds, for molds in which the form panels are removed after molding and see the reference in subclass 1 and 213 of Class 249.
- 250, Radiant Energy, subclass 517.1 for a ray energy shielding structure having defined features specialized for such use.
- 256, Fences, for a structure having features peculiar to such use, particularly fences limited structurally to a definite height or posts having features for retaining fence wires or rails.
- 266, Metallurgical Apparatus, appropriate subclasses, particularly subclasses 280+ for an apparatus having structure with a feature specialized to such use, e.g., a leak proof furnace bottom construction, blast furnace bell cover, localized lining or oxidizable blocks, oxidizable devices between refractory blocks, etc., and see the above reference to Class 110.
- 296, Land Vehicles: Bodies and Tops, appropriate subclasses for an enclosure having a feature specialized to use as or with land vehicles and see the search note for Railway Rolling Stock, in References to Other Classes, herein.
- 312, Supports: Cabinet Structure, for a construction forming an enclosure which as an entity is portable, i.e., merely rests on a surface in its use position as distinct from a structure for Class 52 which is generally assembled at the job site. See also Subclass References to the Current Class, above, for the location of a discussion of exemplary classes and subclasses that provide for an article or article support installed in means forming an enclosure or part thereof.
- 396, Photography, subclasses 1+ for a specialized photos:graphic studio.
- 403, Joints and Connections, for joints or junctures formed by members connected together at a single locus of more general application. Class 52 takes joints specialized to use in constructions generally identified by terms such as: housing, public works or civil engineering, e.g., rigid module or panel joints. In interpreting this line the following exemplary subject matter is in Class 52; (1) a system of physical connected joints forming a load bearing con-

- struction or accommodating itself to a transverse loading, e.g., a truss frame or a composite or tapered shaft; (2) connected rigid panels or modules having integral or permanently attached modifications on plural edges thereof for repetitious edge-to-edge connection, (3) a rigid panel connected by or to elongated rigid load resisting members, e.g., studs, columns, etc., in generally parallel planes, (4) rigid panels held in a fixed relationship to each other or to a sub-structure by a plurality of mechanical connectors, (5) a composite structure having a specified feature for receiving an impaling type fastener, e.g., a nailing beam or panel, (6) rigid panels with edge portions lapped so their edges lie in different planes, (7) rigid panels having a bridger strip overlying their edge juncture and (8) joined components incorporating an adjunct having a Class 52 function, e.g., a joint with means for retaining an external dissimilar element, e.g., a panel.
- 404, Road Structure, Process, or Apparatus, appropriate subclasses for road structure limited to highway or walkway use. Structure of general utility, and particularly where Class 52 provides a specific subclass locus for such structure is classified in Class 52.
- 405, Hydraulic and Earth Engineering, subclasses 15+ for bank, shore, or bed protecting structures (e.g., revetments, breakwaters, etc.); subclasses 52+ for fluid control structures (dams, dikes, canals, channels, etc.); subclasses 132+ for underground shaft and tunnel construction; subclasses 195.1+ for miscellaneous static marine structures; subclasses 229+ for foundations not provided for elsewhere; and subclass 258.1 for earth treating or control structures (e.g., retaining walls, sheet piles, etc.).
- 410, Freight Accommodation on Freight Carrier, subclasses 129+ for load bracing panels or movable or removable bulkheads.
- 428, Stock Material or Miscellaneous Articles, for a stock material product or article of that class not having either a physical feature for cooperation with another panel structure or mechanical means for connecting plural components of the panel, and see Lines With Other Classes and Within This Class, in the main definition of Class 428.
- 432, Heating, subclasses 247+ for chamber structure specialized to heating, and see the search note for Furnaces, in References to Other Classes, herein.

- 446, Amusement Devices: Toys, subclasses 85+ for construction toys; and subclasses 476+ for toy buildings.
- 454, Ventilation, for buildings having means for directing air in a desired internal path or including air flow compelling means and see Subclass References to the Current Class, above, regarding a ventilating structure with air directing or controlling features other than mere windows.
- 607, Surgery: Light, Thermal, and Electrical Application, subclasses 81+ for a cabinet having features for treating a patient by light, heat, or electrical effects.

#### **SECTION IV - GLOSSARY**

#### **ARCHITRAVE**

The finish around and extending away from a door or window opening.

#### **BACKER**

Means forming an extended surface against which a settable material is cast, e.g., troweled, spread, poured etc., the material when set forming a wear surface or facing.

#### BARRIER

A construction forming an extended indefinite surface preventing or inhibiting the passage of persons or things, e.g., wall, ceiling, floor, roof or cover.

#### **BLOCK**

A module whose depth is substantial relative to its length and height and which in use forms a stable load-bearing member.

#### **COVER**

Generally synonymous with "roof" but used where "roof" in some instances may be inapt, e.g., a covering supported by an article, a canopy, a man-hole closure, etc.

#### DISPARATE ARTICLE

An article which does not form an essential component of a building construction of plural components, but is in the nature of an adjunct having no essential loadbearing, supporting, joining or protective function.

#### **ENCLOSURE**

Means surrounding an area or volume to be occupied by persons, animals or goods.

#### **ENTRANCE**

An opening for persons or things, but not for a fluid or a mass of particles having a fluid like characteristic.

#### FACER OR FACING (SEE MODULE)

An element or structure which (1) forms an exposed surface section of a barrier or (2) the panel held by a frame, a framing element or an elongated sustainer, e.g., the movable closure part of a door or window. In the latter respect it differs from a module in that it is not used in repetition to form an extended surface.

#### FLASHING

Thin sheet of material covering or extending into a joint to deflect liquid from the joint.

#### LOAD-BEARING

A construction or component which is sufficiently strong and rigid to act as the primary support for other constructions or components against gravity or to resist transverse loading (see sustainer).

#### **MODULAR**

A construction utilizing modules.

#### **MODULE**

A component of building construction, usually designated by terms such as; brick, block, slab, panel, tile, sheet, precast monolith, etc., which when assembled in repetitious juxtaposition with other such preformed shapes (with or without interposed connecting means or material) define a surface of a construction, e.g., of a wall, ceiling or floor.

#### MONOLITH

A structure erected in situ by casting a water-settable composition, e.g., plaster or concrete.

#### PANEL (SEE MODULE)

The term panel is used to denote a thin rigid sheetlike

structure which may not be disclosed as used repetitiously, e.g., table top or pane.

#### **PORTAL**

Structure defining an opening through a barrier for the passage of light, air, persons or things, e.g., the framing for a door or a window opening.

#### PREFORM OR PRESHAPE

A component of a building construction which is in completed form before its use at the job site. (Compare Module).

#### **REBAR**

An art term for a concrete reinforcing rod. A rebar chair is a device for spacing a rebar from a concrete form.

#### REINFORCEMENT, EMBEDDED

A body placed within and covered by a cast material or a foraminous member wherein the holes are filled by a cast material.

#### **REVEAL**

The sides of a door or window opening between the faces of the barrier.

#### ROOF (SEE COVER)

A rigid cover extending above and supported by the uppermost termini of walls or columns.

#### SETTABLE MATERIAL

A component which is applied or formed in a fluent condition but sets or hardens in the final product, e.g., concrete, cement or plaster.

#### SHAFT (SEE SUSTAINER)

A member which has a limited closed periphery and which is greatly elongated relative to its length. It is generic to "sustainer" in that it may not have a load bearing function.

#### **SPECIFIED**

The subclass definition must be referred to.

#### **STIFFENER**

Means embedded in cast material or extending between sustainers or load bearing components which act to strengthen a construction in contradistinction to acting as a primary loadbearing or bend-resisting member.

#### **SUSTAINER**

A rigid member or construction having a limited closed periphery which is (1) greatly elongated relative to any lateral dimension (2) resists transverse loading and (3) supports or retains other components of a building construction, e.g., stud, joist, beam, or column.

#### **TENDON**

A tensioned strandlike component of a unit which places the principal part of the unit under compression.

#### TILE

A thin, relatively rigid module which when applied repetitiously in edge-to-edge relationship to a backing surface forms an exposed facing

#### **SUBCLASSES**

This subclass is indented under the class definition. Structure comprising means to sense a condition and to exercise a control operation of a structure or component thereof in response to said condition.

- 137, Fluid Handling, subclasses 67+ for a destructible or deformable control of a fluid device and subclass 468 for a residual thermal responsive valve.
- 138, Pipes and Tubular Conduits, subclasses 26+ for such a device with a pressure compensator.
- 169, Fire Extinguishers, subclasses 56+ for condition responsive control of an extinguishing system and subclass 42 for a fusible connection, per se.
- 454, Ventilation, subclasses 70+, 75, 229, 238, 239, 255, 256, and 340 for automatic control of ventilating systems.

### 2.11 SHAPED OR STRENGTHENED BY FLUID PRESSURE:

This subclass is indented under the class definition. Structure in which a totally enclosed fluid is utilized to shape, support, or strengthen a building structure or component.

(1) Note. The following exemplary locations are noted as providing for or including structure involving the use of an inflating fluid:

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- for an article or material supported cover.
- 63, for an enclosure which includes a flaccid, nonmetallic, or foraminous surfacing.
- 115, for a fluid pressure actuated, relatively movable shaft assembly.
- 204.52, for a passage between the internal volume of a double pane panel and the ambient, which passage may be plugged and the internal volume pressurized.

- 4, Baths, Closets, Sinks, and Spittoons, subclass 499 for an air inflatable or air supported covering for a pool, or subclass 588 for an inflatable bath tub for an infant.
- 5, Beds, subclasses 449+ for an inflatable mattress or cushion.
- 49, Movable or Removable Closures, subclass 477.1 inflatable or fluid pressure responsive closure seal.
- 92, Expansible Chamber Devices, subclasses 34+ for a bellows-type, expansible chamber or subclasses 89+ for a collapsible chamber wall portion (e.g., hinged, flexible wall, etc.).
- 128, Surgery, subclass 118.1 for an inflatable pad to press against a human body as part of a method or apparatus of doing a diagnostic test or subclass 865 for an inflatable or expandable ear protector.
- 138, Pipes and Tubular Conduits, subclass 93 for an inflatable closure or plug for a pipe.

- 152, Resilient Tires and Wheels, subclasses 450+ for a pneumatic tire or inner tube.
- 156, Adhesive Bonding and Miscellaneous Chemical Manufacture, subclasses 145+ for a method of encapsulating permanently fluent material in hollow or porous lamina or filling of space between adhered laminae, subclass 156 for a method of using fluid pressure to prevent collapse of hollow structure during assembly and/or joining, or subclass 286 for a method of using direct application of vacuum or fluid pressure during bonding to remove gas from between assembled laminae.
- 166, Wells, subclass 187 for a packer or plug expanded by confined fluid from a central chamber, pump, or plunger.
- 220, Receptacles, subclass 232 for a receptacle having a closure that includes an inflatable gasket or packing.
- 244, Aeronautics, subclass 5 for a heavier-than-air aircraft that has its weight diminished by buoyant gas, subclasses 24+ for aircraft that is lighter than air, subclass 98 for a gas bag inflation control for a lighter-than-air aircraft, or subclass 128 lighter-than-air aircraft gas cell construction and arrangement.
- 254, Implement or Apparatus for Applying Pushing or Pulling Force, subclasses 93+ pushing and pulling implements actuated by fluid pressure.
- 267, Spring Devices, subclasses 64.11+ for a spring device for a vehicle that uses compressible fluid.
- 273, Amusement Devices: Games, subclasses 65+ for an inflatable football or basketball.
- 277, Seal for a Joint or Juncture, for a generic sealing means or process, subclasses 331+ for an inflatable packer for well apparatus, subclass 583 for a dynamic circumferential contacting inflatable seal or seal biased by an inflatable member, subclass 605 for a hollow, fluid filled or inflatable static contacting seal for a pipe, conduit, or cable, or subclass 646 for an inflatable static contact seal

- for other than an internal combustion engine, or pipe, conduit, or cable.
- 383, Flexible Bags, subclass 3 for an inflatable bag.
- 441, Buoys, Rafts, and Aquatic Devices, subclasses 40+ for an inflatable raft or subclasses 90+ for a personal water rescue or life protecting flotation device including mechanical inflation means.
- 446, Amusement Devices: Toys, subclasses 220+ for an inflatable toy.
- 450, Foundation Garments, subclass 38 for a device designed to fit a breast or chest (e.g., brassieres, etc.) of a human body to protect, compress, support, restrain, or alter its configuration including inflatable or liquid-containing chambers.
- 600, Surgery, subclass 31 for an implanted urinary or colonic incontinent device or treatment (e.g., artificial sphincters, etc.) having fluid actuated occluding means (e.g., inflatable cuff, etc.) for a human body.
- 604, Surgery, subclasses 96.01+ for treating material introduced or removed through a conduit, holder, or implantable reservoir inserted in a human body orifice and inflated in a human body (e.g., inflatable nozzle, dilator, balloon catheter, occluder, etc.).
- 606, Surgery, subclasses 191+ for an internal pressure applicator (e.g., dilator) that is inflatable or expandable by fluid or subclass 202 for a pneumatic cuff external pressure applicator.

#### 2.12 Loading dock doorway seal:

This subclass is indented under subclass 2.11. Structure wherein the building structure or component comprises one or more tubular members, which members are mounted around at least a substantial part of the periphery of an opening defining a passage into and out of a building (e.g., a warehouse) and which will, when inflated, perform a sealing and cushioning function.

(1) Note. The members are intended, most commonly, to be engaged by the rear of a body of a vehicle which is being loaded or unloaded through the opening, the purpose being to minimize the infiltra-

- tion of outside air into the building and the vehicle.
- (2) Note. The presence or absence of a conventional closure member for the opening is immaterial insofar as the subject matter of this subclass is concerned.

#### 2.13 Confined tubular element exerts force:

This subclass is indented under subclass 2.11. Structure wherein the building structure or component comprises a tubular element which is located between two, relatively rigid members and which, when inflated, develops an outward force against the members.

 Note. In some instances, both of the member are fixed, but, in other instances, at least one of the members is intended to have some degree of movement.

#### 2.14 For sealing a closure panel:

This subclass is indented under subclass 2.13. Structure wherein the tubular element is utilized as a seal for a plate-like member (e.g., of glass, wood, etc.) which serves to close a passage.

#### 2.15 Form for hardenable material:

This subclass is indented under subclass 2.11. Structure wherein the building structure or component comprises a member, often sheet-like in nature, which is shaped by the fluid it encloses and which, in turn, serves to shape or support one or more elements of a building that are being formed from material initially lacking a shape-retaining property, but which material subsequently undergoes a change of state and becomes relatively rigid.

 Note. Upon the change of state of the material, the member often becomes superfluous, and, in some instances, is removed.

#### 2.16 Fluid pressure is subatmospheric:

This subclass is indented under subclass 2.11. Structure wherein the enclosed fluid is at a pressure which is less than that of the ambient air; i.e., a vacuum of one degree or another has been established.

(1) Note. The density of certain materials can be increased by subjecting them to a vacuum.

#### 2.17 Including ingress/egress provision:

This subclass is indented under subclass 2.11. Structure wherein the enclosure includes a system, device, element, etc., which enables entry or exit, usually that of persons.

(1) Note. Included here is an air lock, a door, a flap, etc.

### 2.18 Intersecting tubular elements form framework:

This subclass is indented under subclass 2.11. Structure wherein the building structure or component comprises tubular elements which intersect one another and which, when inflated, form the frame members of a building.

#### 2.19 Supported on rigid-walled structure:

This subclass is indented under subclass 2.11. Structure wherein the building structure or component comprises a sheetlike member which rests on and is affixed to the relatively rigid walls of an open-top enclosure.

(1) Note. The member sometimes serves as an upward extension of the enclosure, but, in other instances, is more nearly in the nature of a cover therefor.

#### 2.21 Upstanding column (e.g., mast, tower):

This subclass is indented under subclass 2.11. Structure wherein the building structure or component comprises a tubular member, anchored at one end, which is extended by the fluid into a generally vertical position.

- (1) Note. A structure of this subclass may be "self-erecting".
- (2) Note. A structure of this subclass may consist of a plurality of members connected end-to-end.

### 2.22 Comprising spaced, sheetlike members and fluid chamber therebetween:

This subclass is indented under subclass 2.11. Structure wherein the building structure or component comprises two or more flexible panels which are in a spaced-apart, more or

less parallel relationship with one another and which are joined, at least along their perimeters, in a fluid-tight manner.

#### 2.23 Including subdividing elements:

This subclass is indented under subclass 2.22. Structure wherein a plurality of elements (e.g., webs), extending more or less transversely of, and fluid-tightly joined to, the members are provided for dividing the chamber into a plurality of smaller chambers.

#### 2.24 Sheetlike member comprises plural, edgejoined sections:

This subclass is indented under subclass 2.11. Structure wherein the building structure or component is a flexible panel which is fabricated from number of smaller sections which have been joined (e.g., by a seam) to one another, fluid-tightly, along their perimeters.

#### 2.25 Including holddown means:

This subclass is indented under subclass 2.11. Structure wherein the building structure or component is provided with means for securing it to an underlying object, structure or surface.

(1) Note. Frequently, the building structure or component is being anchored to the ground.

#### 2.26 Comprising strandlike element:

This subclass is indented under subclass 2.25. Structure wherein the hold-down means, or a component thereof, comprises at least one elongated, nonrigid elements (e.g., a cable, a rope, etc.).

This subclass is indented under the class definition. Structure including means covering and supported by an article or a body of material, which article or body of material is not part of a static building structure, and which is not configured for a specific article.

- 100, Presses, subclasses 65+ for such structure compacting material within a silo.
- 135, Tent, Canopy, Umbrella, or Cane, subclasses 87+ for nonarticle supported canopies.

- 150, Purses, Wallets, and Protective Covers, subclasses 154+ for a protective cover of flaccid material for covering, and being supported by, a specific article, and see the Notes and the extensive Search Class notes thereof.
- 220, Receptacles, subclasses 216+ for a receptacle with a cover which floats on its contents.
- This subclass is indented under subclass 3. Structure including a feature which retains the cover and penetrates the ground or the article covered.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

155+, for an earth piercing or expanding anchor.

5 This subclass is indented under subclass 3. Structure which comprises a plurality of strips or slats fastened together by means which allow pivoted motion of one strip or slat relative to another.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

342+, for openly spaced slat type lath.

#### SEE OR SEARCH CLASS:

160, Flexible or Portable Closure, Partition, or Panel, subclasses 218+ for movably interconnected slats or strips of more general utility.

This subclass is indented under the class definition. Subject matter specialized to the presentation of an attraction or accommodation of an audience group, such specialized structure including (1) an arrangement of seats or slopes relative to the locus of the attraction, (2) a structure having means peculiar to the accommodation of the audience or (3) a stage, screen or area of activities which aid in the presentation of or serves as the locus of the attraction.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

36.1+, for an enclosure combined with a piece of furniture or a fixture of more general application, e.g., a movable platform or support even though defined as a stage or theater seat but

which is capable of use in other environments or individual seats.

182+, for a stepped structure which could as well be used as strips, e.g., do not define seat and foot rest portions.

#### SEE OR SEARCH CLASS:

- 472, Amusement Devices, particularly subclasses 75+ for an apparatus or setting intended to be used on or in cooperation with the stage of a theater and subclasses 92+ for a playing or exhibition area enclosure.
- 7 This subclass is indented under subclass 6. Structure including a movable floor or platform particularly related to a proscenium or to a seating arrangement for viewers.

#### SEE OR SEARCH CLASS:

182, Fire Escape, Ladder, or Scaffold, appropriate subclass for a platform of more general application.

8 This subclass is indented under subclass 6. Structure relating to a particular arrangement of seats relative to an enclosure or area of the presentation or attraction.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 6, for an outdoor theatre having traffic paths so that vehicles are disposed in a desired arrangement and 174+ for another structure with a traffic guiding feature.
- 9 This subclass is indented under subclass 8. Structure including a section of seats mounted for movement with respect to another section or to the floor upon which it rests.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

183, for a mere stepped structure of more general application having interconnected relatively movable components.

This subclass is indented under subclass 9. Structure wherein the shifting of the section is accomplished by, or aided by means releasing stored or generated energy, e.g., motor, spring, etc.

This subclass is indented under the class definition. Subject matter which forms a cover (roof) having an edge or forms a valley and in which there is a means located in, at or near the edge of the valley which provides for the drainage or discharge of liquid flowing from the upper surface of the cover into the means.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

95, for a gable or eave construction with water discharge means for handling liquid from a subjacent area of the cover.

#### SEE OR SEARCH CLASS:

248, Supports, subclass 48.1 for an eave trough support.

405, Hydraulic and Earth Engineering, subclasses 119+ for a trough or channel having no feature relating it to a roof.

This subclass is indented under subclass 11.

Structure comprising means for preventing debris from (1) entering the eave trough or (2) entering a downspout or other structure associated with said eave trough.

#### SEE OR SEARCH CLASS:

210, Liquid Purification or Separation, appropriate subclasses, particularly subclasses 154+, 459+, and 473+ for a strainer, per se, or a strainer combined with an eave trough which does not have any features particularly adapting it for association with a roof.

13 This subclass is indented under subclass 11. Structure wherein there is means forming a gutter located at the vertex of two portions of a cover construction which slope towards each other.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

58+, for exterior type flashing.

This subclass is indented under subclass 13.

Structure in which there is means forming a second gutter on the under side of the cover structure.

This subclass is indented under subclass 11.

Structure in which the means forming a trough is, at least in part, within the peripheral edge of the cover.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

24+, for cover means to retain solid material deposited on the roof, e.g., an anti-snow slide.

This subclass is indented under subclass 11.
Structure including means forming or connected to a downspout.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

12, for a gutter or eave trough with strainer.

17 This subclass is indented under the class definition. Structure peculiar to railway car roofs combined with means situated in the roof under its exterior covering acting to inhibit or retard the passage of heat, sound, vibrations, etc.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

144+, for a building construction with an exposed surface with an acoustical feature, and see notes.

#### SEE OR SEARCH CLASS:

105, Railway Rolling Stock, subclasses 238.1+ for railway rolling stock comprising a special car body.

This subclass is indented under the class definition. Structure wherein (1) at least one portion of the roof is offset to form a plurality of roof surfaces at different levels, said offset portion being substantially coextensive with one dimension of the roof or (2) the roof surface has distinct surfaces inclined from a common plane to form a serrated roof.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

200, for a cupola or turret construction, i.e., a small building extending upwardly of a roof which as an entity is within the outer periphery of a roof.

639+, for a truss member of more general utility forming a peak or curved chord.

This subclass is indented under the class definition. Structure comprising a horizontal or inclined cover and entrance means defining an opening for persons or objects which pass through the cover.

This subclass is indented under subclass 19. Structure in which the cover is supported by a wall construction enclosing a space which is entered through the opening.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

131+, 192+, 198+, 200, 204.1+, 218, 219, 220.1+, 302.1+, and 553 for a building construction with a material (e.g., air or water) port, duct or channel.

- 21 This subclass is indented under subclass 19. Structure including a masonry or concrete component which is constructed entirely of masonry or concrete.
- This subclass is indented under the class definition. Structure including means forming the uppermost exposed surfacing of a building and having features peculiar to such use, e.g., a ridge, arch, coping, inclined rafter, etc., combined with a ceiling construction which is openly spaced from said means.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

275+, for a construction of laterally related modules which form an intersection.

479+, for a construction of face to face barrier sections spaced by an internal frame or shaft.

This subclass is indented under the class definition. Structure including a rod-like member extending over the outside of a building structure, usually the roof, and acting to hold such structure to the ground or substructure.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

4, for an article supported cover which may utilize exterior hold-down strands.

This subclass is indented under the class definition. Structure including means for preventing or restraining the movement of foreign objects or material not permanently part of the roof; e.g., anti-slides for snow.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

101, for an animal, e.g., bird, blocker which is a trap, scarer or lateral projection.

25 This subclass is indented under subclass 24. Structure comprising a horizontal rod-like portion supported by a plurality of spaced members.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

677+, for a spacer-positioner for a rod, e.g., a support spacer reinforcing a rod from a support.

26 This subclass is indented under subclass 24. Structure comprising means to penetrate the base which supports the means for restraining movement of foreign objects.

# 27 INCLUDING COMPONENT (E.G., WALL) DESIGNED TO RECEIVE A DISPARATE ARTICLE HAVING DISPARATE ARTICLE MOUNTED THERETO:

This subclass is indented under the class definition. Structure having a modification of a static structure or component for attaching an article, in which the article is not essential to the subject matter of this class.

 Note. The exemplary classes and subclasses noted here below under "SEARCH CLASS" provide for an article or article support installed in means forming an enclosure or part thereof. Many classes provide for static type devices, e.g., supports or furniture, and take such combinations wherein no structure is defined other than that required to accommodate or isolate the article provided for such a class. Others take such combinations relating to operative apparatus wherein an operating unit or significant characteristic for such a class is defined, e.g., electrical device or a burner, wherein the enclosure is a furnace, a casing for a machine, a tool, etc. Others are referred to in subclasses indented hereunder or in the class definition of this class.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 6+, for a building combined with an auditorium or theatre feature.
- 24, for a projecting object restrainer.
- 57, for a finial or cresting.
- 73, for a cantilevered rigid barrier, e.g., rigid awnings.
- 101, for an animal blocker which is a trap scarer or lateral projection.
- 129, through 133, for a burial vault and adjunct.
- 173.1, for static structures combined with subject matter from another class.
- 220.1+, for a service duct including an electrical conduit within a barrier.
- 273, for a flexible shaped or attached floor covering.
- 698+, for anchor or ties of more general application.
- 716.1+, for an in situ attached channel or trim strip which may be disclosed as enclosing a wire or pipe.

#### SEE OR SEARCH CLASS:

- 5, Beds, subclass 2.1, 10.1 and 159.1.
- 62, Refrigeration, subclasses 259.1+.
- 73, Measuring and Testing, subclass 431.
- 89, Ordnance, subclass 36.04
- 104, Railways, subclasses 27+.
- 108, Horizontally Supported Planar Surfaces, subclasses 42+.
- 160, Flexible or Portable Closure, Partition, or Panel, subclasses 19+.
- 174, Electricity: Conductors and Insulators, subclass 48 and 158+.
- 211, Supports: Racks, subclasses 87+.
- 220, Receptacles, subclasses 3.3+.
- 248, Supports, appropriate subclasses.
- 297, Chairs and Seats, subclasses 14+ and 147.
- 312, Supports: Cabinet Structure, subclass 242, 245+, and 351.1+.
- 343, Communications: Radio Wave Antennas, subclasses 872+.
- 361, Electricity: Electrical Systems and Devices, subclasses 600+.

#### 27.5 With a telephone (e.g., booth or stand):

This subclass is indented under subclass 27. Static structure or component which encloses or supports an audio transmission and receiving means.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

764+, for sheet like sections between framing members.

This subclass is indented under subclass 27. Structure wherein the article is an artificial illuminating means.

#### SEE OR SEARCH CLASS:

362, Illumination, subclasses 145+ for combined light and structure there provided for. The line between this class (52) and Class 362 subclass is: Class 362, subclasses 145+ takes structure illuminated by artificial means or merely supporting illuminating means. Class (52) takes building structure including features having functions in addition to merely supporting the illuminating means or forming the enclosure, barrier or other structure illuminated. In interpreting this line the presence of a claim to building structure not including illuminating means is considered conclusive of the fact that such additional function features are present.

This subclass is indented under subclass 27. Structure wherein the securing means causes or permits movement of the article.

#### SEE OR SEARCH THIS CLASS, SUB-CLASS:

36.4, for a structure wherein the article is a fixed bed, chair, table or shelf.

#### SEE OR SEARCH CLASS:

483, Tool Changing, generally for apparatus or method for transferring tools combined with support or storage means.

This subclass is indented under subclass 29. Structure comprising a multi-level structure provided with a platform and hoisting machin-

ery therefor for conveying persons or goods to or from the different levels.

#### SEE OR SEARCH CLASS:

187, Elevator, Industrial Lift Truck, or Stationary Lift for Vehicle, appropriate subclasses for an elevator and building combination wherein no more structure of the building is defined than is necessary to support the elevator.

31 This subclass is indented under subclass 29. Structure wherein the article, device or adjunct includes means for conveying, or aiding in the conveying of articles which means includes a revolving member or endless web or strand type conveyor wherein the article is readily removable from the conveyor.

#### SEE OR SEARCH CLASS:

198, Conveyors: Power-Driven, appropriate subclasses for such apparatus combined with a mere enclosure, particularly subclass 860.3.

- 32 This subclass is indented under subclass 29. Structure wherein the supporting means can oscillate about a fixed axis.
- 33 This subclass is indented under subclass 27. Structure wherein an article or articles or adjunct, are so arranged so as to form a defined path for traffic, e.g., a store with a defined furniture arrangement.

SEE OR SEARCH THIS CLASS, SUBCLASS:

174+, for other structure with a traffic guiding feature.

This subclass is indented under subclass 27. Structure wherein the article is a fixture for receiving body waste matter or for washing.

#### SEE OR SEARCH CLASS:

4, Baths, Closets, Sinks, and Spittoons, appropriate subclass for apparatus having a fixture with a feature for the purpose of that class, e.g., drains, flow lines, etc. This class (52) takes (1) structures merely forming enclosures or barriers, (2) joints between a lavatory fixture and a barrier or (3) an in

situ type enclosure having features with functions other than merely enclosing a class 4 device.

This subclass is indented under subclass 34. Wall juncture (e.g., bathtub surround kit): Structure in which a discrete connector joins at least an edge of a lavatory fixture; e.g., tub or basin and a wall.

## 36.1 Task-area type repositionable component (e.g., modular booth, workstation, or concession stand):

This subclass is indented under subclass 27. Component in which user or work related equipment is self supporting and is designed to be assembled and disassembled (i.e., transportable).

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

79.1+, for a floor to ceiling assembly; e.g., wall, defining an occupiable space.

205, for a partition framed for a door or window.

481.2, for demountable partitions separating two areas.

#### **36.2** With top covering:

This subclass is indented under subclass 36.1. Task area component including a ceiling above an occupant.

#### **36.3** Fireplace mantel:

This subclass is indented under subclass 27. Component in which a casing and shelf are attached to both a portion of the static structure and a framed opening made in a chimney to hold an open fire.

## 36.4 Component having specific attachment for an article comprising a horizontal, planar surface (e.g., shelf, bed):

This subclass is indented under subclass 27. Component which is specifically designed or modified for furniture of the type having a relatively level area lying in a plane that carries an item, items, or a person.

(1) Note. Articles that have means for mounting on an existing wall, floor, or ceiling are classified with the article.

(2) Note. A static structure component that is made to incorporate the article is classified in Class 52.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 6, for a static structure including an auditorium or stadium feature arranged relative to a center or attraction.
- 29+, for an article mounted for movement.

#### SEE OR SEARCH CLASS:

- 5, Beds, subclass 2.1, 10.1+, and 159.1 for specific bed structure with a static structure
- 108, Horizontally Supported Planar Surfaces, subclasses 33+ and 42+ for specific planar surface structure with a static structure.
- 160, Flexible or Portable Closure, Partition, or Panel, subclasses 19+ for specific partition structure with a static structure.
- 182, Fire Escape, Ladder, or Scaffold, subclasses 222+ for a ladder, scaffold, or mast with a workman's platform with a static structure.
- 211, Supports: Racks, subclasses 87.01+ for specific rack structure with a static structure.
- 248, Supports, appropriate subclasses for specific supports (e.g., shelf brackets).
- 297, Chairs and Seats, subclasses 14+ and 147 for specific chair or seat structure with a static structure.
- 312, Supports: Cabinet Structure, subclass 242, 245+, and 351.1+ for specific cabinet structure with a static structure.

## 36.5 Connecting feature for modular-type panels having article (e.g., cabinet, shelf bracket) attachment:

This subclass is indented under subclass 36.4. Component specific attachment in which a means securing two edge-abutting thin rigid sheet-type members includes a means for supporting the horizontal planar surface.

#### **36.6** Including a slotted tubular portion:

This subclass is indented under subclass 36.5. Connecting feature in which the securing means consists of a hollow elongated cylindrical-like section with apertures for the article holding piece.

37 This subclass is indented under subclass 27. Structure wherein the article support means is attached to or adjacent a door or window frame, usually a window washer's hook to which a safety belt may be attached.

#### SEE OR SEARCH CLASS:

- 49, Movable or Removable Closures, subclasses 50+ for a movable or removable shield which blocks a passage vacated by a closure.
- 182, Fire Escape, Ladder, or Scaffold, subclasses 53+ for a balcony-like platform detachably mounted in a window opening.
- 211, Supports: Racks, subclasses 87.01+ for a rack with means specializing it for mounting on a window frame.
- This subclass is indented under subclass 27. Structure wherein the disparate article is a sign, e.g., name plate or ornamental plaque.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 103+, for a structure which, as a whole, serves as a marker or monument and see notes thereto.
- 105, for a building component with indicia.

- 40, Card, Picture, or Sign Exhibiting, subclass 124.5 for memorial tablets and subclasses 541+ for illuminated signs and subclasses 584+ for signs, and see the reference to Class 52 in the class definition of Class 40.
- 39 This subclass is indented under subclass 27. Structure in which there is means supporting the disparate article from means forming a ceiling, i.e., the under side of a roof or floor.

248, Supports, subclasses 317+ for a suspended support of more general application.

This subclass is indented under subclass 27. Structure in which the disparate article is supported by an elongated rigid structure, i.e., pole, post or mast.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

110, for a shaft mounted on a vehicle shell. 651.01+, for a three dimensional open-work, particularly subclass 649 for a mast with distinct terminal structure, e.g., a horned type power line tower.

697, for a shaft with braced cross arm.

720.1+, for a miscellaneous shaft, e.g., pole, post, column, etc., particularly subclass 721 for a composite shaft with laterally extending member.

#### SEE OR SEARCH CLASS:

- 174, Electricity: Conductors and Insulators, subclasses 40+, particularly subclasses 45 and 149 for elongated members, e.g., poles and posts, having claimed features specialized to electrical use such as: (1) positive recitation of an electrical conductor, (2) an insulator supporting or retaining an electrical conductor or (3) means supporting said insulator.
- 220, Receptacles, subclass 475, 567, and 628+ for an elevated tank involving specific receptacle structure.
- 248, Supports, subclasses 127+, particularly subclass 146 for a stand not involving a specific in situ erected article supporting skeleton tower.
- 256, Fences, for a fence or post having features for retaining a wire or rail.
- This subclass is indented under the class definition. Structure forming a walkway above a roof or forming a support (saddle) for such a walkway, usually present on a railway car.
- This subclass is indented under subclass 41. Structure in which the roof covering includes a seam and the walkway conforms to the shape of the seam.

- This subclass is indented under subclass 42. Structure in which the walkway or saddle also conforms to and accommodates means forming a ridge cap extending along the roof.
- This subclass is indented under subclass 41. Structure in which the walkway is fastened to a roof seam.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

42+, for walkways conforming to a roof seam.

This subclass is indented under the class definition. Structure comprising roof construction peculiar to railroad cars.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

17, for an insulated car roof.

18, for a clerestory or sawtooth roof.

41+, for a roof with running board or saddle.

#### SEE OR SEARCH CLASS:

105, Railway Rolling Stock, subclasses 238.1+ for railway rolling stock comprising a special car body.

- 46 This subclass is indented under subclass 45. Structure comprising a covering supporting member (carline) which extends laterally of the roof and is substantially coextensive with the transverse dimension of the car.
- This subclass is indented under subclass 46.
  Structure associated structurally with a ridge running centrally and longitudinally of the car roof.
- 48 This subclass is indented under subclass 46. Structure comprising a plurality of carlines and interconnecting structural members extending longitudinally of the roof or diagonally of the carlines.
- This subclass is indented under subclass 46. Structure comprising a cover strip overlying the carline and a joint between two juxtaposed roofing sheets, said strip being substantially coextensive with the joint.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

459+, for a surfacing with a strip covered joint of more general application.

50 This subclass is indented under subclass 46. Structure in which the carline is composed of distinct sections which diverge or converge toward each other in a nonvertical plane or (2) form chords of a truss which diverge or converge.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

639+, for a peaked truss of more general application.

- 51 This subclass is indented under subclass 46. Structure including a separate support or connecting means attached to the end of a carline and engaging a vertical support, e.g., car wall.
- This subclass is indented under subclass 46. Structure in which the carline is positioned above the joint between plural covering sheets.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

459+, for similar structure of more general utility.

- 53 This subclass is indented under subclass 45. Structure comprising one or more transversely extending ribs formed integrally with the roof sections, and rib being substantially coextensive with the transverse dimension of the roof.
- 54 This subclass is indented under subclass 45. Structure comprising a central cover sustaining member elevated above the edges and extending longitudinally of the roof.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

47, for a carline and longitudinal ridge construction.

55 This subclass is indented under subclass 54. Structure including relatively movable roof sheets, usually to compensate for car motion.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 204.1+, for another construction with a feature for a closure, e.g., a removable panel over an opening.
- 573.1, for a residual structure having means accommodating a dimensional variation responsive to varying conditions.
- 56 This subclass is indented under subclass 45. Structure comprising a continuation of the facing member of the roof which overhangs the junction of the roof and car walls.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

11+, for a cover with section overhanging a gutter.

94+, for another gable or eave terminal construction.

This subclass is indented under the class definition. Structure including ornamental means at a ridge or peak of a roof.

#### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclasses 3 through 30, and 542.2+ for a miscellaneous ornamental article not provided for elsewhere.
- This subclass is indented under the class definition. Structure including sheet material on the exterior of a building structure which material is anchored at at least one edge and extends over a joint of the structure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 94+, for a gable or eave covering sheet material often termed "roof edge flashing".
- 101, for an insect blocking means, e.g., termite shield.
- 302.5, for a liquid directing sheet material disposed within the confines of a barrier.
- 408+, for a sheet laminae separating components of an in situ construction, e.g., through wall type flashing.
- 459+, for a construction of more general application involving a strip covering a juncture of panels.

- 285, Pipe Joints or Couplings, subclasses 42+ for a roof or floor drain type flashing forming a seal around a duct or pipe.
- 59 This subclass is indented under subclass 58. Structure including a block forming part of a vertical structure and having a groove which receives part of the flashing.
  - (1) Note. For definition of a "BLOCK" see glossary.
- This subclass is indented under subclass 58. Structure wherein the sheet material comprises at least two interfitting sections.
- This subclass is indented under subclass 60. Structure wherein the parts which interfit are within a vertical structure, i.e., wall.
- This subclass is indented under subclass 58. Structure wherein a part of the sheet material extends into a wall.
- This subclass is indented under the class definition. Structure forming a complete enclosure and including a thin, flexible, flaccid, nonmetallic or foraminous membrane which forms an exposed surfacing and is stretched between elongated members of its substructure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 2.11+, for a structure strengthened by internal fluid pressure, e.g., inflated.
- 3+, for an article supported cover.
- 64+, for a collapsible type structure of rigid panels interconnected for repositioning.
- 222, for a tensioned sheet facing.
- 273, for a shaped or edge attached flexible covering, e.g., carpet, in contact with a barrier.
- 393+, for a relatively yieldable preformed separator.
- 404.1+, for insulation in a hollow cavity.
- 518+, for a shingle type surfacing.
- 782.1+, for a composite panel.

#### SEE OR SEARCH CLASS:

- 135, Tent, Canopy, Umbrella, or Cane, subclasses 87+ for structures having a flexible covering without rigid panels preformed before in situ erection and see the reference to Class 135 in the class definition of Class 52.
- 312, Supports: Cabinet Structure, subclasses 3+ for an enclosure having a flexible covering and also an article support.
- This subclass is indented under the class definition. Structure including at least one component which is a wall, ceiling, roof, cover section or major section thereof which are fixedly mounted for repetitious or continuous movement relative to a base without total disconnection therefrom for purposes of changing the size or function of the structure or a portion thereof or providing continuous movement during use, e.g., revolving building.
  - (1) Note. A movable closure, e.g., door or window is not a barrier component except where a door or window constitutes a major section.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 7, for a movable stage combined with a static structure forming an enclosure therefor.
- for a movable support for a disparate article.
- 55, for a car roof with a relatively movable section.
- 63, for an enclosure including as a component a nonmetallic flexible surfacing section.
- 79.1+, for a three dimensional sub- enclosure which in use is often assembled with another enclosure.
- 111+, for a tower or mast with powered motive means.
- 122.1+, for a structure with hoist or handle means.
- 127.1+, for another structure with an adjunct provided solely for facilitating assembly or disassembly.
- 143, for a structure with means transporting it from place-to-place.

- 183, for a stepped structure with interconnecting relatively movable components.
- 204.1+, for a structure having means forming a window or door opening.

- 49, Movable or Removable Closures, appropriate subclasses for a repetitiously movable closure providing for the passage of persons or things through a barrier.
- 105, Railway Rolling Stock, subclasses 238.1+, especially subclasses 377.01+ and 379 for a freight car with a movable body component.
- 135, Tent, Canopy, Umbrella, or Cane, for a tent with a foldable frame and see the reference to that class in subclass 85 of this class.
- 160, Flexible or Portable Closure, Partition, or Panel, for such a structure which does not form an enclosure for a usable space.
- 296, Land Vehicles: Bodies and Tops, subclasses 177+ for a collapsible vehicle body and subclasses 107.01+ for a letdown-type vehicle top.
- This subclass is indented under subclass 64. Structure wherein the barrier or major section thereof is mounted for rotation in a horizontal plane about a vertical axis.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 7, for a theater with a movable stage.
- 31, and 32, for an enclosure with a disparate article support mounted for swinging or rotation.

#### SEE OR SEARCH CLASS:

- 472, Amusement Devices, particularly subclasses 1+ for an amusement roundabout appropriate therefor.
- This subclass is indented under subclass 64. Structure wherein the movable barrier is a complete roof which is connected to and movable as an entity relative to its supporting columns or walls defining or within an area normally covered by the roof.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 63, for a construction including a flaccid surfacing component.
- 69, for a barrier swingable to act as a wall or canopy.
- 83, for a roof or enclosure suspended by flexible means and fixedly related to support means.
- This subclass is indented under subclass 64. Structure wherein the movable barrier sections include one structure defining an occupiable space which structure is arranged to telescope, either by sliding or swinging, within another such structure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

79.1+, for another three-dimensional, preassembled subenclosure which is not mounted for movement.

#### SEE OR SEARCH CLASS:

- 280, Land Vehicles, subclasses 638+ for an extensible vehicle structure there provided for.
- This subclass is indented under subclass 64. Structure comprising a wall construction having an extension, which extension is adapted to be manipulated to form a roof section.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 66, for an entire roof movably connected to a substructure.
- 69, for a vertical section hinged to swing to form a horizontal barrier, e.g., canopy.
- 59 This subclass is indented under subclass 64. Structure in which at least two of the components are connected to each other by a hinge fastened to both, with one of the components in the erected or use position being vertical but which can be folded to a nonvertical, e.g., collapsed position.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

68, for a structure, e.g., stile, having a wall extension convertible to a roof.

- 73, for a rigid barrier, e.g., canopy, cantilevered from a vertical support.
- 70 This subclass is indented under subclass 64. Structure including three walls interconnected by hinge means allowing folding of the walls in order to collapse the structure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 66, for a foldable enclosure wherein a complete roof is connected to walls.
- 71, for a barrier hinged intermediate its length.
- This subclass is indented under subclass 64. Structure wherein the movable barrier section cooperates with other sections in forming a barrier, the sections being hingedly connected so as to allow the barrier to be collapsed.

#### SEE OR SEARCH CLASS:

- 108, Horizontally Supported Planar Surfaces, subclasses 166+ for such a structure which is freely movable over a supporting surface, e.g., a foldable stage, per se.
- This subclass is indented under subclass 64. Structure comprising a structural unit mounted on and projecting above a roof surface and communicating with the space below the roof.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 55, for a centrally ridged car roof with a movable cover section.
- 64, for an upright support member connected to a movable cover section.
- 66, for a cover assembly movable as an entity.
- 200, for a cupola or skylight mounted on a roof and having no movable major components.
- This subclass is indented under the class definition. Structure including a barrier which extends laterally from an upright support with the barrier being unsupported except by means connected to the upright support.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 11+, for a cover with a surface water receiver at an eave or valley.
- 64+, particularly 66, 68, and 69 for a movable mounted barrier section which may be cantilevered in one position.
- 97, for an externally projecting liquid deflector.
- 201, for a bay window which extends downwardly to a base, e.g., the earth.
- 260, for a cast in situ column with radial reinforcement for a floor.
- 74 This subclass is indented under subclass 73. Structure including means defining an inclined panel overlying an open space which panel extends downwardly and outwardly of a vertical structure, usually a wall, to which the upper edge of the panel is secured.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

473, for a louvered panel having no feature for holding it as a unit in a cantilevered, e.g., inclined position.

#### SEE OR SEARCH CLASS:

- 49, Movable or Removable Closures, subclass 71 for a movable rigid awning which also acts as a closure.
- 135, Tent, Canopy, Umbrella, or Cane, subclasses 15.1+ for an umbrella.
- 160, Flexible or Portable Closure, Partition, or Panel, subclasses 45+ for a flexible panel type awning.
- 296, Land Vehicles: Bodies and Tops, subclasses 152+ for a vehicle door or window canopy.
- This subclass is indented under subclass 74. Structure wherein the inclined surface consists of a series of parallel slats, the longitudinal axes of which are downwardly and outwardly inclined.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

518+, for another lapped multiplanar surfacing.

- This subclass is indented under subclass 75.

  Structure wherein the outside edges of the outside slats are intersected by vertically depending side panels which are secured and extend generally perpendicular to the vertical structure.
- 77 This subclass is indented under subclass 76. Structure in which the side panels construction differs in kind from that of the inclined surface panel construction.
- 78 This subclass is indented under subclass 74. Structure wherein the inclined surface consists of a series of integral or separated slats disposed with their longitudinal axes parallel to the major plane of the vertical structure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

473, for another louvered panel.

518+, for another lapped multiplanar, e.g., shingle-like surfacing.

- 79.1 This subclass is indented under the class definition. Structure including one or more preassembled or prefabricated structural means, each defining 1) at least a two sided or walled sub-occupiable space assembly, 2) a preassembled or prefabricated room or occupiable space which is to be assembled with like or unlike structures to form a complete structure, or 3) a single or composite wall, usually having a curved cross-section which acts, with other structure to form one or more occupiable spaces.
  - (1) Note. The structures classified in this subclass usually fall into one of the following categories: a) one or more prefabricated room units which can be associated with other like or unlike units to form a building or plurality of occupiable spaces; or b) one or more prefabricated partial room units which can be associated with other like or unlike structure to form one or more occupiable spaces.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

67, for a telescoping three-dimensional subenclosure mounted for movement

relative to means forming another enclosure.

- 79.11 This subclass is indented under subclass 79.9. Structure wherein the subenclosures include spaced forms to accept a cast in situ material, such as concrete, which acts as a binder to attach the subenclosures together.
- **79.12** This subclass is indented under subclass 79.9. Structure wherein the sub-enclosures are supported, and thereby attached, by a separate framework or vertical and horizontal sustainer means.
- 79.13 This subclass is indented under subclass 79.9. Structure wherein a plurality of occupiable sub-enclosures or building units are superposed, one above the other, and are attached by a separate and distinct vertical tie member.
- **79.14** This subclass is indented under subclass 79.1. Structure wherein the sub-enclosure or building unit is a single piece, continuous barrier, e.g., poured concrete monolith.

#### SEE OR SEARCH CLASS:

105, Railway Rolling Stock, subclass 405 for concrete modules.

- 79.2 This subclass is indented under subclass 79.1. Structure wherein two or more occupiable units are arranged in such a manner that each unit is vertically offset (higher or lower) with respect to its adjacent unit, but not directly above or below its adjacent unit.
- 79.3 This subclass is indented under subclass 79.1. Structure wherein a plurality of occupiable spaces are superposed, one over the other in such a manner as to have their respective floors horizontal and parallel to each other, and at least one vertical wall of one unit at an angle to at least one vertical wall of another unit.
- **79.4** This subclass is indented under subclass 79.1. Structure wherein the occupiable space has a floor plan which is nonrectangular.
- 79.5 This subclass is indented under subclass 79.1. Structure which is made in such a manner so as to be collapsible to a more compact form for ease of transport from its place of manufacture to the building site.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

64+, for barriers mounted for repetitious movement relative to base without disconnection.

#### SEE OR SEARCH CLASS:

296, Land Vehicles: Bodies and Tops, subclass 27 for collapsible trailers.

- **79.6** This subclass is indented under subclass 79.1. Structure wherein the occupiable space is a porch or vestibule.
- 79.7 This subclass is indented under subclass 79.1. Structure wherein each of two or more subenclosures is provided with an opening through one side thereof, such openings to mate with each other to form a passage for people from one subenclosure to the other.
  - (1) Note. An opening, for this subclass, may be the absence of an entire wall, in which case, each subenclosure would form half of a room.
- **79.8** This subclass is indented under subclass 79.7. Structure wherein the mating openings in each occupiable space are doors for the passage of people.
- 79.9 This subclass is indented under subclass 79.1. Structure wherein two or more occupiable spaces have therebetween means to attach them together or to another common structure.

#### **80.1 COMPOUND CURVE STRUCTURE:**

This subclass is indented under the class definition. Structure having a major exposed portion which conforms to a surface generated by a curved line moving along a curved path; e.g., a sphere, hyperbolic parabloid, or dome.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 2.11+, for a construction which is shaped by fluid pressure.
- 82, for a conical structure.
- 85, for a two-dimensional curvilinear entrance archway.
- 86+, for a two-dimensional vertically curved arch.
- 200, for a skylight.

- 245+, for a noncompound curve curvilinear barrier.
- 639+, for a two-dimensional curved or peaked truss.
- 648.1+, for openwork.

#### SEE OR SEARCH CLASS:

- 135, Tent, Canopy, Umbrella, or Cane, subclasses 124+ for portable structures formed with an arc or dome structure.
- 220, Receptacles, subclasses 565+ for a compound curve; e.g., spheroidal, fluid confining tank.
- 343, Communications: Radio Wave Antennas, subclass 872 for a dome-like antenna housing having a defined electrical characteristic; e.g., a radome.

#### 80.2 Hyperbolic parabloid shape:

This subclass is indented under subclass 80.1. Compound curve structure which is in the form of a saddle shaped quadric surface wherein all sections parallel to one coordinate plane are hyperbolas while all the sections parallel to another coordinate plane are parabolas (if proper orientation of the coordinate axes is assumed).

#### 81.1 Geodesic shape:

This subclass is indented under subclass 80.1. Compound curve structure comprising distinct polygonal panels connected to form a surface which is or approximates a segment of a sphere.

#### 81.2 Having an underlying grid frame:

This subclass is indented under subclass 81.1. Geodesic shape comprising a network of uniformly spaced members which support cover panels.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

648.1+, for three dimensional openwork.

#### 81.3 Frame connection detail:

This subclass is indented under subclass 81.2. Frame in which a node of the structural network members is particularly designed to hold the members together and transmit forces.

403, Joints and Connections, subclasses 169+ for a joint designed for frame members.

### 81.4 Comprised entirely of a single self-supporting basic geometrical shaped panel:

This subclass is indented under subclass 81.1. Shape in which all the panels are of a simple configuration; i.e., triangle or diamond.

#### 81.5 Trapezoidal or rectangular design:

This subclass is indented under subclass 81.4. Panel in which the configuration is a quadrilateral having (1) two parallel sides and two diverging (or converging) sides or (2) all corners at right angles.

#### 81.6 Monolithic construction:

This subclass is indented under subclass 80.1. Shape which is cast as a single piece.

This subclass is indented under the class definition. Structure forming a cover which has a conical surface or formed by three or more generally triangular surface forming members the abutting edges of which form seams or ribs which converge upon a common locus.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

68, for a wall extension movable to form a roof in which an extension component is often formed of triangular sections which pivot to form a radially ribbed cone.

80.1+, for a compound curve structure, e.g., dome, and see notes.

90.1+, for another inclined roof or rafter with a substructure.

This subclass is indented under the class definition. Structure including means covering or enclosing an area which means is suspended by flexible devices attached to structure which extends into the ambient above and beyond said means.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

22+, for a vertically spaced roof section.

73+, for a cantilevered structure which may include a diagonal guy means.

120+, for a mast with cable hoist.

121, and 122.1+, for a static structure combined with hoist means.

506.06+, for an internal facer suspended by flexible or pivoted hanger.

#### SEE OR SEARCH CLASS:

135, Tent, Canopy, Umbrella, or Cane, subclass 90 for a flexible, canopy suspended by flexible means.

This subclass is indented under the class definition. Structure which has a curvilinear crosssection peculiar to the reduction of wind resistance generally termed air foils or streamlined.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

245+, for a structure having or formed by a curvilinear barrier.

#### SEE OR SEARCH CLASS:

244, Aeronautics, subclasses 123+ for an aircraft airfoil construction.

343, Communications: Radio Wave Antennas, subclass 887 for an antenna support with a streamlined cross-section.

This subclass is indented under the class definition. Structure including a facing member in the form of curvilinear arch having structure for the adherence or retention of plastic-torigid, water settable material, e.g., plaster, which material forms a curved exposed surface.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

204.1+, for another construction forming a portal.

250+, for a settable material corner construction of more general application.

This subclass is indented under the class definition. Structure peculiar to an in situ erected primary, load bearing construction which as a whole forms a curved arch whose mid-point is above the externally supported terminal edges.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

67, for a telescoping three-dimensional section which may include a curved segment.

- 80.1+, for a compound curve cover.
- 85, for a settable material, curved, entrance archway.
- 245+, for a space enclosing, curvilinear wall.
- 319+, particularly subclasses 329 and 389 for a generally planar concrete barrier which may include a curved backing member supporting a cast section.
- 575, for a key type block, per se, which can be used to form a curved arch.
- 639+, for a curvilinear or peaked truss.

- 14, Bridges, subclasses 24+ for an arch bridge which is not primarily of stone-like material.
- This subclass is indented under subclass 86. Structure including a horizontal deck construction, e.g., roadway, supported by the structure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS.

174+, for a construction with traffic guiding feature.

- This subclass is indented under subclass 86. Structure in which the arch as a whole is formed by flowable cast material which, when set, forms an entity.
- This subclass is indented under subclass 86. Structure in which the arch is formed by abutting masonry or concrete-like units.

### 90.1 INCLINED TOP COVER (E.G., ROOF, A-FRAME):

This subclass is indented under the class definition. Structure including cover construction or rafters which are at an angle to a horizontal plane.

- (1) Note. The rafter are attached to a vertical supporting substructure; e.g., walls, studding, columns, etc.
- (2) Note. This subclass takes ridge connections without a venting function.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

45+, for a car roof construction.

- 73+, for a cantilevered barrier which is more than a mere eave.
- 82, for a conical or radially ribbed cover.
- 262+, for a floor, ceiling, or roof not having a defined feature relating to an inclined roof or rafter resting on a substructure.
- 272+, for a construction, per se, formed by intersecting barriers even though disclosed or claimed as being at the ridge of a roof.
- 478, for a lapped or strip cover joint surfacing attached to a substructure arrangement; e.g., rafter and purlin.
- 639, for a peaked truss construction.

#### 90.2 On existing roof:

This subclass is indented under subclass 90.1. Inclined cover which is erected on a previously built cover.

### 91.1 Self-supporting cover (i.e., without distinct rafters):

This subclass is indented under subclass 90.1. Inclined cover in which a roof spans from eaves to ridge without being supported by an underlying frame, beam, etc.

#### 91.2 Eave fixed by masonry or settable material:

This subclass is indented under subclass 91.1. Self-supporting cover specialized to the use of cementitious or adhesive type material at the junction of the cover and the supporting substructure; e.g., of a wall.

#### 91.3 Connection for abutting cover sections:

This subclass is indented under subclass 91.1. Self-supporting cover where the entire cover is in portions which are secured together by a fastening means to make a complete cover.

### 92.1 Rafter tie-in at horizontal-type support (e.g., wall plate):

This subclass is indented under subclass 90.1. Inclined cover in which a roof support beam is (1) set or (2) fabricated or cut to a particular shape for attachment to the supporting substructure (e.g., wall top plate).

#### 92.2 Distinct connector fixing rafter to wall plate:

This subclass is indented under subclass 92.1. Tie-in in which a discrete fastener secures the roof support beam to the supporting substructure.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

92.1, for a roof support beam attached to a bearing member without a fastener.

#### 92.3 Rafter end terminating at wall exterior face:

This subclass is indented under subclass 92.1. Tie-in in which the end of the roof support beam, at the eaves, is in the same plane as the supporting substructure outside surface.

### 93.1 Rafter to vertical support (e.g., stud, column, post) connection:

This subclass is indented under subclass 90.1. Inclined cover in which a roof support beam is directly fastened to a load bearing upright element of the supporting substructure.

### 93.2 Rafter overhangs vertical support outside surface:

This subclass is indented under subclass 93.1. Connection in which a roof support beam extends beyond the supporting substructure exterior face.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

92.2, for a rafter connected to a vertical support with a fastener.

This subclass is indented under the class definition. Structure comprising means forming a construction at the gable or eave terminus of a roofing surface which is different in kind from that forming the surface.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 11+, for a cover with an eave gutter.
- 45+, for a car roof, particularly subclass
- 56, for a cover sheet with over-hanging, continuing edge section.
- 73+, for a rigid cantilevered barrier, e.g., awning.
- 90.1+, for an inclined roof having supporting substructure.
- 262+, for a roof extending over at least two vertical supports in which the construction merely involves a roof overhang (eave).

### 95 With conduit or passage means (e.g., eave vent, insulation shield for eave vent):

This subclass is indented under subclass 94. Structure including means forming a passage or conduit from a subjacent area communicating to outside of the roof.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 11+, for an eave or valley gutter receiving liquid flowing from the upper surface of a roof.
- 302.1+, for a construction with fluid passage between the interior of it and the ambient, and see notes.
- 553, for a lapped multiplanar surfacing with a unit spacing or space forming feature.
- 96 This subclass is indented under subclass 94. Structure wherein the material forming at least part of the upper exposed surfaces of a roof between the gables or eaves is bent to form a flange-like portion which extends downwardly to a subjacent edge portion of the roof.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

56, for a car roof with an overhanging edge section.

This subclass is indented under the class definition. Structure including means extending outwardly of the plane of a surface means is defined as functioning to deflect a liquid (rain) away from the barrier surface.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 11+, for a cover with an eave gutter.
- 56, for a car cover with overhanging sheet edge.
- 58+, for an exterior type flashing.
- 74+, for a rigid outrigged awning usually having a flashing or liquid deflector at the wall juncture.
- 94+, for a coping which may have an edge overhanging a wall.
- 302.1+, for a structure with means draining or venting the interior of a construction to the ambient.
- 302.5, and 408+, for sandwiched preformed imperforate member even though they

may have a flanged portion bent to contact the wall.

503+, and 606+, for a liquid deflector within an internal through passage.

This subclass is indented under the class definition. Structure including a distinct section or means which facilitates fracturing of the structure or section thereof.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

105, for an indicia combination including means indicating a cutting or breaking line.

#### SEE OR SEARCH CLASS:

- 137, Fluid Handling, subclass 797 for an element for that class which is breakable, and see the notes.
- 220, Receptacles, subclasses 265+ for a frangible or knockout receptacle closure, and see the notes.
- 428, Stock Material or Miscellaneous Articles, subclass 43 for a stock material product in the form of a single or plural layer web or sheet which has been weakened to permit fracturing through the thickness thereof, and subclass 156 for such a stock material product having a component or layer which varies in thickness.
- 99 This subclass is indented under subclass 98. Structure in which the frangible means is made of a material differing in kind from that of the primary structure, e.g., a metal member attached or embedded in a concrete base member.
- 100 This subclass is indented under subclass 98. Structure in which the frangible section or means is so arranged relative to the original circumscribing boundary surfaces that a corner or a section within such circumscribing boundary surfaces is severable from the original unit.
- This subclass is indented under the class definition. Structure which deters the movement of animal life having (1) a trap, (2), a device which by movement or force repels them or (3) a projection which extends outwardly of a surface of structure to block landing on or movement along the structure.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 24, for a projecting restrainer, e.g., a snow slide stop.
- 58+, for an exterior type flashing.
- 97, for an externally projecting liquid deflector.
- 170, for a shaft reinforcement adjacent the surface of the earth which may act as a protector.
- 408+, for a "through type" flashing which may have a protruding edge.
- 517, for a structure with an insect repellent coating.

#### SEE OR SEARCH CLASS:

- 43, Fishing, Trapping, and Vermin Destroying, subclasses 124+ for a vermin destroying device not structurally combined with a building structure.
- This subclass is indented under the class definition. Structure including a single monolithic unit or a single course of connected modules which unit or course rests on the earth and defines a low wall edging for an area.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 38, for a support for a name plate.
- 103, for a marker or monument.
- 128+, for a burial vault.
- 146, 283, 296+, 300+, and 720+, for a shaft or a related structure of more general application.
- 169.1+, for a structure with defined geos:graphic feature.
- 245, for a tubular structure of more general application.
- 311.1+, for a structure with relief pattern forming an ornamental facing.

- 47, Plant Husbandry, subclass 33 for an edging for gardens there provided for.
- 256, Fences, for a structure of greater height than a mere coping or edging.
- This subclass is indented under the class definition. Structure which indicates a position on or particular use of the earth and has (1) a feature, e.g., indicia, serving such function or (2) a

shape which in its entirety has inherent stability against overturning.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- for a building structure supporting a sign.
- 102, for an earth supported coping, and see notes.
- 105, for a building structure or building component with indicia.
- 128+, for a grave vault.
- 311.1+, for an ornamental component of a building structure for having no feature specialized to use as a marker or monument, particularly subclass 315 for visible embedded elements and subclass 316 for integrally relieved surfaces.
- This subclass is indented under subclass 103. Structure including a visible component that permits the passage of light.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

306+, for a glass block or embedded translucent component.

#### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclass 34 for a pair of substantially coextensive light transmissive sheets, spaced from each other and sealed at their edges to each other, and subclass 38 for a light transmissive mass having a frame or an opaque border around it.
- This subclass is indented under the class definition. Structure including (1) means, e.g., writing, grooves or markings; which (a) indicates a property or characteristic of an element or (b) serves as a gage in the positioning or alignment of a structure; or (2) means identifying the location of an embedded or hidden device or structure.
  - (1) Note. Devices having a structural function, e.g., for locking, positively positioning, receiving, fasteners, etc., are classified in appropriate subclasses below even though they may also serve as an indicator.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

38, for a supported sign, e.g., name plate.

103+, for a marker or monument.

364+, for a member acting as a gage for after-applied plaster coating, e.g., screed.

#### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclass 187 for a stock material product in the form of a single or plural layer web or sheet in which one component is of uniform thickness but nonplanar to form a figured pattern or to yield information, and subclasses 195+ for a stock material product having a discontinuous or differential coating, impregnation or bond to form a pattern or to yield information.
- This subclass is indented under the class definition. Structure having features peculiar to buildings for confining a person so that he cannot leave the building or compartment thereof without outside intervention.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

65, for buildings with revolvable section, e.g., revolving prison cells.

- 49, Movable or Removable Closures, subclasses 15+ for a jail structure restricted to movable doors, their mountings, operators and/or locks.
- 109, Safes, Bank Protection, or a Related Device, appropriate subclasses for a related structure for preventing entrance of persons into a building or part thereof, except subclass 21.5 which is the residual subclass for a structure allowing voice transmission through a closure of barrier irrespective of disclosed purpose.
- This subclass is indented under the class definition. Structure including means defining a wall outside of and attached to the outside of a building wall adjacent a portal opening which in use is below grade level.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

69+, for a structure with a defined terrane an feature.

This subclass is indented under the class definition. Structure including flexible strands or strips or discrete connected sections which when fed from a coiled or collapsed storage position form an elongated rigid shaft section extending from the storage position and vice versa.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 2.11+, for a structure shaped or strengthened by fluid pressure.
- 109, for a lazy tong extension unit, and see the search notes.

#### SEE OR SEARCH CLASS:

- 182, Fire Escape, Ladder, or Scaffold, subclass 41 for a self-rigidifying upwardly extensible flexible ladder or escape means.
- 242, Winding, Tensioning, or Guiding, subclasses 370+ and 901 for a reeling device which may store a strip that is convertible from a coiled to an extended rigid state.
- 343, Communications: Radio Wave Antennas, subclass 877 for an antenna with reel and subclasses 900+ for rod type antennas.
- This subclass is indented under the class definition. Structure comprising a series of diagonal levers pivoted together at their mid-points and at their ends by which arrangement the device as a whole can be extended and retracted.

#### SEE OR SEARCH CLASS:

- 14, Bridges, subclass 45 for a lazy tong draw bridge.
- 74, Machine Element or Mechanism, subclass 521 for a lazy tong mechanical movement.
- 135, Tent, Canopy, Umbrella, or Cane, subclass 131 and 145 for lazy-tong type frameworks for portable shelters.
- 182, Fire Escape, Ladder, or Scaffold, subclasses 69.1+ for a lazy tong means for extending an extension ladder and

- subclass 141 for a platform elevating means which may include lazy tong extension means.
- 187, Elevator, Industrial Lift Truck, or Stationary Lift for Vehicle, subclass 211 and 269 for an elevator with lazy tong elevating means.
- 110 This subclass is indented under the class definition. Structure including an elongated member mounted on a part of the shell of a vehicle body which can be projected or is fixedly mounted to extend outwardly of the shell, which member is usually disclosed as being an antenna.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

108, 109, and 111+, for another extensible or relatively movable shaft.

#### SEE OR SEARCH CLASS:

- 343, Communications: Radio Wave Antennas, subclasses 711+ for an antenna attached to a vehicle wherein a significant electrical or radiation limitation is defined.
- This subclass is indented under the class definition. Structure comprising a rigid elongated member or construction at least part of a section of which is movable relatively to another section or to a base and mechanical motive means for applying power to affect such movement, e.g., motor, spring, pulley, crank or cable.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 108, for a strip which can be coiled for storage or projected outwardly to a rigid position.
- 109, for a lazy tong extension unit.
- 110, for a vehicle shell attached shaft, e.g., antenna.
- 122.1+, for a static structure with hoist or handle means for adjusting component level or assembling.
- 143, for another static structure with a transportation feature.
- 146+, for a vertical structure with diagonal brace or guy.
- 632, for a manually extensible shaft.

- 633+, for openwork structures, particularly subclasses 648+ for three dimensional open work, e.g., tower or mast.
- 726.1+, for an end-to-end connected section shaft.

- 182, Fire Escape, Ladder, or Scaffold, appropriate subclasses for a mast with a workman's platform, particularly subclass 62.5 for such an apparatus having extensible vertical and nonvertical sections.
- 212, Traversing Hoists, appropriate subclasses for a collapsible, extensible, horizontally swinging, or vertically swinging, boom for a load-handling apparatus. Patents placed as originals in Class 212 should claim structure peculiar to load-handling apparatus.
- 248, Supports, subclasses 351+ for a prop or brace there provided for.
- 254, Implements or Apparatus for Applying Pushing or Pulling Force, subclasses 264+ for a derrick hoist having means to hoist an external load.
- 343, Communications: Radio Wave Antennas, subclasses 874+ for mast or tower type antennas with a significant recitation of an electrical feature.
- 362, Illumination, subclass 431 for an electrically operated light supporting post.
- 112 This subclass is indented under subclass 111.

  Structure in which the terminal ends of shaft section which are movable longitudinally each have on their outer ends means for engaging opposed barriers, e.g., floor and ceiling of a mine.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

122.1+, for a building component with hoist or handle means.

#### SEE OR SEARCH CLASS:

- 173, Tool Driving or Impacting, subclasses 31+ for such devices with work engaging means supporting the tool device.
- 211, Supports: Racks, subclasses 123+ for a horizontal rod type rack which includes means engaging opposed walls.

- 248, Supports, subclass 200.1 for an extensible column mounted between opposed surfaces for supporting a bracket; and subclass 644 for such a column for supporting a machine.
- 254, Implements or Apparatus for Applying Pushing or Pulling Force, appropriate subclass for an extensible device, designed to move an object, particularly subclass 93 for a fluid operated device, subclass 95 for a rack and pinion operated device, subclasses 98+ for a screw-operated device, and subclass 387 for a cable-operated device.
- 113 This subclass is indented under subclass 111.

  Structure wherein spring means are provided to return the rigid elongated member or construction to an upright position after deflection by a transversely applied outside force.
- This subclass is indented under subclass 111.

  Structure wherein the structure is mounted to move in a substantially horizontal plane about an axis normal to said plane, e.g., a rotatable building.

#### SEE OR SEARCH CLASS:

- 212, Traversing Hoists, subclasses 223+ for a load-handling boom and sluing mechanism therefor.
- 115 This subclass is indented under subclass 111.

  Structure wherein the means for moving the shaft includes a motor utilizing a fluid as its source of power which motor is connected to the shaft and its base.

- 91, Motors: Expansible Chamber Type, appropriate subclasses for an expansible chamber type motor, particularly subclasses 167+ for an apparatus wherein some of the extension equals the extension of individual chambers.
- 92, Expansible Chamber Devices, appropriate subclasses particularly subclasses 51+ for a mutually relatively movable cylinder or sleeve device.
- 212, Traversing Hoists, subclass 238 and 261 for a load-handling (i.e., crane) boom and a fluid ram for swinging it in a vertical plane. See also subclass

- 297 for a crane-boom supporting tower and a fluid cylinder to raise the same from a horizontal-transport position.
- 343, Communications: Radio Wave Antennas, subclass 902 for a telescoping fluid pressure actuated rod type antenna having a feature specialized to such use.
- This subclass is indented under subclass 111.
  Structure wherein the shaft is pivoted so as to allow it to tilt relative to a base.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

113, for a spring actuated return post or column.

- This subclass is indented under subclass 116.
  Structure wherein the shaft is divided into multiple discrete sections which may change their position with respect to each other.
- This subclass is indented under subclass 117.

  Structure wherein one of said sections is extensible from within the other.

#### SEE OR SEARCH CLASS:

- 212, Traversing Hoists, subclass 296 for a telescoping boom-supporting tower and means to permit the tower to collapse to a position for transporting the crane; and subclasses 231 and 264 for an extensible, vertically swinging crane boom.
- 119 This subclass is indented under subclass 117. Structure including a rigid member extending between the shaft and base and connected to one and slidably contacting the other, acting to elevate the shaft.
- This subclass is indented under subclass 117.

  Structure including a cable passing over a drum or pulley mounted on a vertical member acting to elevate the shaft or shaft section.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

121, for a cable hoist to extend a non-tilting sectional mast.

#### SEE OR SEARCH CLASS:

- 212, Traversing Hoists, subclasses 239+ and 262 for a vertically swinging crane boom actuated by a flexible cable.
- This subclass is indented under subclass 111.

  Structure wherein the elongated assembly is extended and collapsed by means of a flexible cable, e.g., Bowden wire, or hoisted by a cable.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 120, for a tilting mast with relatively movable sections utilizing a gin pole hoist.
- 632, for a manually extensible shaft.

#### SEE OR SEARCH CLASS:

- 74, Machine Element or Mechanism, subclasses 500.5+ for a hand operated control lever and linkage system with a flexible transmitter.
- 212, Traversing Hoists, subclasses 230+, 264, and 267 for extensible boom structure for load-handling apparatus.

## 122.1 WITH LIFTING OR HANDLING MEANS FOR PRIMARY COMPONENT OR ASSEMBLY:

This subclass is indented under the class definition. Structure including installed means which has utility for raising or lowering a construction, or a primary component thereof during in situ assembly, or for adjustment while in use.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 6+, for a building with a theatre, or stadium feature which may be movable.
- 29+, for a disparate article, or its support, mounted for movement.
- 64+, for a barrier, or major component thereof mounted for in situ repositioning, i.e., to change size, or shape, or for continuous movement.
- 111+, for a mast or tower with motive power means.
- 365, for a screed having a position adjusting means.
- 678, for means adjustable spacing a concrete reinforcing rod from a form surface.

698+, for an anchor or tie which may be adjustable.

#### 123.1 Mast or enclosure section elevated to superimposed position:

This subclass is indented under subclass 122.1. Structure wherein the installed means raises (a) a disconnected elongated vertical shaft or group of shafts, i.e., a mast, or a construction surrounding an area or volume to be occupied by persons, animals, or goods, i.e., an enclosure section, to a vertically extending position above a lower mast or enclosure section or, (b) a first mast or enclosure section to make room for a similar disconnected section below, the mast or enclosure sections in their superimposed position being longitudinally joined to form an erected structure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

111+, for a shaft or mast having power means for moving the shaft or mast as an entirety relative to a base section thereof or relative to other connected sections thereof during use.

#### 124.1 Vault component:

This subclass is indented under subclass 122.1. Structure in which the primary component is a unit, e.g., the cover, of an enclosed receptacle capable of receiving an organic or inorganic body for either burial or installment at a particular site.

(1) Note. The body may be, for example, a dead being, a casket, or electrical, or sewer connections which are placed within the stationary vault at a given location below or on the ground surface.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

128+, for vaults, per se.

#### SEE OR SEARCH CLASS:

27, Undertaking, for a coffin, casket, or portable coffin case for receiving and transporting a dead body to a burial site.

### 124.2 Having hand, hoist, or tackle engaging means embedded in settable material:

This subclass is indented under subclass 124.1. Structure in which the installed means (a) is a separate means for positively contacting, i.e., engaging, a living being's hand or a mechanical lifting, or grasping device and (b) is, or is attached to an element that is, intimately surrounded and held, i.e., embedded, in an initially fluent material which has hardened, i.e., set, into a firm connection with the engaging means or element all of which substantially forms the unit of the receptacle.

- (1) Note. Examples of settable materials are concrete, cement and plaster.
- (2) Note. Hand, hoist, or tackle engaging means which are screwed, nailed, or otherwise attached to the primary component after it has been made are not proper for this subclass.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

124.1, for a handle that is integrally cast i.e., not a separate element embedded in the settable material.

#### 125.1 Lift slab:

This subclass is indented under subclass 122.1. Structure wherein the construction or primary component is a horizontal barrier which is specifically configured to be elevated from a stack, or point of manufacture to a final, in-use position in a building or other construction such that during elevation the barrier maintains a horizontal orientation.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 126.1+, for installed means which only adjusts the final position of a construction or primary component thereof and is not used to lift the component into place.
- 745.1+, for a process involving forming a unit and moving it into position.
- 749.1+, for apparatus especially adapted for in situ construction.

### 125.2 Construction or component having means to engage hand or cable-type lifting means:

This subclass is indented under subclass 122.1. Structure in which the installed means is a means attached to, integrally formed with, or embedded in the construction or primary component for positively contacting, i.e., engaging, (a) a living being's hand, or (b) a flaccidly suspended or constructed hoisting means.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

698+, for anchor elements, per se, which may be used as engaging means.

### 125.3 Unitary engaging means in monolithic or single construction or component:

This subclass is indented under subclass 125.2. Structure in which the construction or primary component is formed from a monolithic or single piece of material having a portion thereof which is given a specific shape to form the engaging means.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

124.1, for vault components having unitary engaging means.

#### 125.4 Embedded in settable material:

This subclass is indented under subclass 125.2. Structure in which the engaging means is, or is attached to an element that is, intimately surrounded and held, i.e., embedded, in an initially fluent material which has hardened, i.e., set, into a firm connection with the engaging means or element all of which substantially forms the construction or primary component.

- (1) Note. Examples of settable materials are concrete, cement and plaster.
- (2) Note. Engaging means which are screwed, nailed, or otherwise attached to the construction or primary component after it has been made are not proper for this subclass.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

698+, for an anchor or other handling means adapted to be embedded in settable material.

#### 125.5 Embedded socket element:

This subclass is indented under subclass 125.4. Structure where the engaging means comprises a separate, female type, or concave receiving chamber embedded in the construction or primary component with the sides of the receiving chamber being engaged by the hand or the hoisting means.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

704+, for sockets, per se.

## 125.6 Engaging means cooperates with rigid, intermediate device which distributes load or lifts multiple components:

This subclass is indented under subclass 125.2. Structure wherein the engaging means is connected to the cable type lifting means through a solid, i.e., rigid, element suspended from the cable type lifting means which element either (a) distributes the component's load between plural locations on the element, or (b) lifts a plurality of components.

#### 126.1 Position adjusting means; e.g., leveling:

This subclass is indented under subclass 122.1. Structure having installed means consisting of position adjusting means (a) for moving a construction or primary component thereof towards its final position, (b) for holding the construction or component in its final position relative to a nonparallel subsurface, or (c) for leveling the construction or component relative to a support surface.

 Note. A support surface may be a predominantly horizontal surface such as the earth, or it may be another primary component of a static structure or construction.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

122.1, 123.1, 124.1, 124.2, 125.1 - 125.6, for installed means which move a construction or primary component thereof from an inoperative location to an operative, or in use position.

#### 126.2 For service duct or outlet:

This subclass is indented under subclass 126.1. Structure wherein the construction or primary component is either (a) a conduit for water, fuel, heating or cooling fluids, or electrical conductors, or (b) an outlet element for the conduit, and the position adjusting means moves the conduit or the outlet element relative to each other or the support surface.

SEE OR SEARCH THIS CLASS, SUBCLASS:

220.1+, for a service duct, per se, within a barrier

#### 126.3 For vertical barrier only:

This subclass is indented under subclass 126.1. Structure wherein the construction or primary component has its largest, generally planar, surface perpendicular to the horizon, i.e., vertical, in its final assembled form and prevents or inhibits the passage of persons, or things, i.e., acts as a barrier.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

126.1+, for both vertical and horizontal barriers being adjusted together.

238.1+, for adjustable components of a vertical barrier, e.g., a wall, which engage a floor or ceiling without adjusting the position of the barrier.

#### 126.4 Threaded element engages support surface:

This subclass is indented under subclass 126.3. Structure wherein the position adjusting means consists of a helically ridged, i.e., threaded, element which contacts the supporting surface and, through rotation of the threaded element, serves to adjust the position of the vertical barrier.

 Note. The threaded element may be internally or externally threaded, e.g., a nut or a bolt.

#### 126.5 For horizontal barrier only:

This subclass is indented under subclass 126.1. Structure wherein the construction or primary component has its largest, generally planar, surface parallel with the horizon, i.e., horizontal, in its final assembled form and prevents or

inhibits the passage of persons or things, i.e., acts as a barrier.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

126.1+, if both vertical and horizontal barriers are being adjusted together.

#### 126.6 Adjustable pedestal:

This subclass is indented under subclass 126.5. Structure wherein the position adjusting means has a wide base which engages a lower supporting surface and holds an upper, relatively movable portion which engages the horizontal barrier.

#### 126.7 Threaded element engages support surface:

This subclass is indented under subclass 126.1. Structure wherein the position adjusting means consists of a helically ridged, i.e., threaded, element which contacts the supporting surface and, through rotation of the threaded element, serves to adjust the position of the construction or primary component thereof.

(1) Note. The threaded element may be internally or externally, threaded, e.g., a nut or a bolt.

### 127.1 WITH ADJUNCTIVE MEANS FOR ASSEMBLY OR DISASSEMBLY:

This subclass is indented under the class definition. Structure including means which facilitates the physical positioning of a component in the static structure or its removal therefrom and is not essential to the completed structure but is in the nature of an accessory, i.e., an adjunct, which is useful only in joining or uniting, i.e., assembling, the component to the structure, or separating or dividing, i.e., disassembling, the component from the structure.

(1) Note. Tools, or access openings used in the assembly or disassembly of a component and structure are included herein.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

122.1+, for a static structure with an installed lifting or handling means which is often used for assembling and disassembling, and the notes thereunder.

- 514, for a damaged element which has been repaired by the use of an additional element.
- 641, and 645+, for a truss wherein the components are formed for adjustment, collapse, or demounting.
- 741.1+, for a process of assembly or manufacture of an in situ construction.

- 137, Fluid Handling, subclasses 315.01 through 329.4 for a fluid handling device with repair, tapping, or assembly means.
- 165, Heat Exchange, subclasses 76+ for heat exchange apparatus with assembly means.
- 166, Wells, subclasses 85.1+ for wells with below and above ground modifications of an assembly or disassembly nature.
- 210, Liquid Purification or Separation, subclasses 232+ for liquid purification or separation devices with assembly means.
- 285, Pipe Joints or Couplings, subclasses 18+ for pipe joints or couplings with assembly means or features.

#### 127.11 Cam surface:

This subclass is indented under subclass 127.7. Structure wherein the adjunctive means manipulates or provides admittance to a sliding, wedging or rotating eccentric means, i.e., a camming means, which uses its sloped or eccentric face in the assembly or disassembly of the structure.

(1) Note. Threaded engaging surfaces alone are not considered camming surfaces although if they propel a camming surface or are tapered for causing a camming action they would be considered proper herein.

#### 127.12 Threaded engagement means:

This subclass is indented under subclass 127.7. Structure wherein the tool manipulates, or is provided admittance to a helically ridged element, i.e., a threaded element, whereby the threaded element positively contacts and is used for assembly or disassembly of the structure.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

127.11, for a threaded element which engages or comprises a cam or wedge.

### 127.2 Removable prop or brace combined with structure component:

This subclass is indented under subclass 127.1. Structure wherein the adjunctive means includes a removable, compressive or tensile, element, i.e., a prop or brace, which bridges between spaced parts of the static structure to support or hold the component of the static structure during assembly of the structure.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 127.3, for a prop or brace which is not temporary and positions the component relative to a flowable, or settable material.
- 146, for a prop or brace which is otherwise not temporary.
- 749.1+, for props and braces for assembly of a static structure which are not claimed in combination with the static structure.

#### SEE OR SEARCH CLASS:

- 206, Special Receptacle or Package, for a prop or brace used only in shipping of a static structure component.
- 248, Supports, subclasses 354.1+ for an adjustable prop or brace for an article.
- 269, Work Holders, for general purpose braces and work holders.

### 127.3 Having component positioning means or control means for flowable material:

This subclass is indented under subclass 127.1. Structure wherein the adjunctive means (a) locates the component relative to the static structure or another component thereof to provide reaction against, space for, drying or setting time for, or a shaping configuration to, a fluent substance, or (b) regulates or directs the flow of the substance.

(1) Note. The fluent substance need only be fluent during the positioning of the component and may harden or set thereafter, e.g., concrete, cement, plaster, or glue.

(2) Note. Adjunctive means which excludes the flowable material from a building part, or permits it to flow into a building part are included herein.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 127.2, for a removable (i.e., temporary) prop or brace combined with a component for positioning the component relative to a flowable or settable material during assembly.
- 371, if the component being positioned is a screed.
- 603, if the means is integral with the module or element being positioned.
- 677+, if the component being positioned is an open-work, or rebar.

#### SEE OR SEARCH CLASS:

264, Plastic and Nonmetallic Article Shaping or Treating: Processes, for a means positioning a building component in a removable form-work, or means retaining removable form-works.

### 127.4 Opening or passageway for flowable material:

This subclass is indented under subclass 127.3. Structure wherein the adjunctive means provides an ingress for the fluent material to enter into the component of the static structure.

### 127.5 Specific hand or tool engaging surface on structure component:

This subclass is indented under subclass 127.1. Structure wherein the adjunctive means includes a face on the component of the static structure to be positively contacted, i.e., engaged, directly by a hand of a living being or by a mechanical force transmitting implement, i.e., a tool, during assembly or disassembly.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

127.7, for an opening, or component configuration which merely provides access for a tool, but is not intended to be engaged by the tool, or if only a locking, latching, or attaching means is engaged.

#### 127.6 Panel and frame connection:

This subclass is indented under subclass 127.5. Structure wherein a flat, planar component or assembly and a peripheral framework component or assembly are joined together and either of the components or assemblies, or a retaining trim strip therefor, has the tool engaging face.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

127.8, for a tool, or an opening providing access for tool, used in locking, latching, or attaching and wherein the tool only engages the lock, latch, or attaching means.

# 127.7 Structure includes tool or opening to provide access for a tool used in operating a locking, latching, attaching, or adjusting means:

This subclass is indented under subclass 127.1. Structure wherein the adjunctive means includes either a mechanical force transmitting implement, i.e., a tool, for manipulating a securing, connecting, fastening, or regulating means during the assembly or disassembly, or a tool admitting aperture which is only used during the assembly, or disassembly.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

584, for a clamp type joining means where no tool or access opening is claimed.

749.1+, for a tool, or implement for in situ construction where no part of the building is claimed.

### 127.8 Panel joined to or released from peripheral frame:

This subclass is indented under subclass 127.7. Structure wherein the component is a flat, planar sheet of material to be attached to or removed from a surrounding framework without disassembling the framework.

#### 127.9 Tool operates swinging arm latch:

This subclass is indented under subclass 127.7. Structure wherein the adjunctive means manipulates or provides admittance to a connecting means having a pivot attaching it to one component and spaced engaging means adapted to engage a second component, i.e., a pivoted or swinging arm latching means.

This subclass is indented under the class definition. Structure including means defining a receptacle having a space which receives a dead body, casket or coffin at the burial site for interment.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

19, 192+, 198+, 234+, 245+, and 261+ for a construction forming an enclosure of more general application.

#### SEE OR SEARCH CLASS:

- 27, Undertaking, subclasses 2+ for a coffin, casket or portable coffin-case for receiving and transporting a body for burial.
- This subclass is indented under subclass 128. Structure including apparatus and materials for treating the corpse or products, e.g., fluids and gasses emitted by it.

#### SEE OR SEARCH CLASS:

- 27, Undertaking, subclasses 21.1+ for a coffin or burial casket having means for disinfecting or preserving.
- 130 This subclass is indented under subclass 129. Structure including a disinfectant means acting to preserve the corpse or to treat the corpse product.

#### SEE OR SEARCH CLASS:

- 424, Drug, Bio-Affecting and Body Treating Compositions, appropriate subclass for a disinfecting composition.
- 131 This subclass is indented under subclass 128. Structure including an opening, e.g., port, in an outer barrier of the receptacle which communicates the enclosed space with the ambient atmosphere or earth.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 129+, for a drain or vent with a corpse product treating feature.
- 198+, for a similar structure of more general application.

This subclass is indented under subclass 131.
Structure including structure within the enclosed space for directing circulating air.

#### SEE OR SEARCH CLASS:

- 454, Ventilation, appropriate subclass, for a ventilated enclosure of more general application having means for directing or forcing air to or from an enclosed space relative to the ambient atmosphere.
- 133 This subclass is indented under subclass 128. Structure including means combined with the receptacle, e.g., vault, having functions other than primarily forming the structure of the receptacle or perfecting such structure for its primary purpose, e.g., tombstones, transparent section, wheels, closure operations, etc.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 124.1+, for a vault element with handling means.
- 129+, for a corpse or corpse product treating combination.
- 131+, for a vault with fluid guiding means.
- 139+, for a vault with a closure which may include a hinge or operator.
- This subclass is indented under subclass 128.

  Structure, including a building construction in addition to that forming the receptacle, e.g., a mausoleum.
  - (1) Note. The building construction usually holds a plurality of vaults arranged to form a wall which defines a side of an access corridor in a building and each vault has an entrance opening into the corridor.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

234+, for a multiroom building of more general utility.

135 This subclass is indented under subclass 128. Structure including concentric inner and outer wall layers with a sealing material that is different from the material of the receptacles, e.g., asphalt or Portland cement, between the receptacles.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 265, for a floor and wall formed by a laminated barrier enclosing a space.
- 267+, for a laminated wall enclosing a space.
- 408+, for a construction involving a preshaped dividing lamina.
- This subclass is indented under subclass 128.

  Structure including structure dividing the enclosed space into a plurality of compartments.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 134, for a building having plural corpse compartments.
- 135, for a vault of concentric receptacles with dissimilar lamina between them.
- 234+, for a compartment construction of more general utility, e.g., a multiroom building.
- 137 This subclass is indented under subclass 136. Structure including plural cover type members, one above the other, defining a compartment therebetween, and a compartment for the corpse below the lower cover member.
  - (1) Note. A vault having a casket chamber and a dead air chamber above the casket chamber are here included.
- 138 This subclass is indented under subclass 128. Structure including a continuous concave, open-bottom, cover (hood) having substantial side walls adapted to envelop a casket or coffin and usually resting upon a base.
- 139 This subclass is indented under subclass 128. Structure including a separate closure, forming one barrier wall of the receptacle, which is placed against terminal edges of other walls of the receptacle.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

138, for a hood-like receptacle the vertical walls of which rest on a floor.

140 This subclass is indented under subclass 139. Structure including a feature which confines flowable, plastic or elastomeric material acting as a hermetic seal between the closure and the walls of the receptacle.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 393+, for a construction with resilient divider between opposed layers.
- 416+, for lapped multiplanar or strip covered joint surfacing utilizing a settable material applied in situ.

#### SEE OR SEARCH CLASS:

- 49, Movable or Removable Closures, subclasses 475.1+ for a closure seal, e.g., striker gasket or weather strip and see the search notes thereto for loci of other seals.
- 277, Seal for a Joint or Juncture, for a generic sealing means or process, subclasses 628+ for a static contact seal for other than an internal combustion engine, or pipe, conduit, or cable.
- 141 This subclass is indented under subclass 140. Structure including a closure and receptacle wall juncture feature of the tongue-and-groove type and in which the sealing material is in the groove and the tongue is embedded in the sealing material.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 436, for a construction where there is a settable material section between integral interengaging means or modules.
- This subclass is indented under subclass 139. Structure in which the receptacle side walls and the floor are composed of a plurality of distinct sections or units assembled together.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 250+, for a construction forming an intersection with a cast component.
- 264+, for a construction wherein a floor supports spaced walls.

143 This subclass is indented under the class definition. Structure including means facilitating the transportation of an entire building or a component specialized to such use.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

122.1+, for a structure with lifting or handling means.

#### SEE OR SEARCH CLASS:

- 105, Railway Rolling Stock, for a railway vehicle specialized to such use.
- 114, Ships, for an enclosure specialized to use on water.
- 296, Land Vehicles: Bodies and Tops, for a vehicle having running gear or other features specialized to travel over the earth. Class 52 takes a separable enclosure which is convertible to in situ ground supported use and a mere structure forming a box-like enclosure
- This subclass is indented under the class definition. Structure which in the completed construction presents an exposed, i.e., visible, face having a defined physical configuration peculiar to the attenuation of sound.
  - (1) Note. Mere definition of a material, e.g., fibrous, porous, rock wool, etc., is not a definition of a physical configuration and such subject matter classified elsewhere in this class on other features, and see the references herein after under "Search Class".

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 17, for an insulated car roof.
- 167.1+, for means compensating earth- transmitted force, e.g., earthquakes.
- 238.1+, for a resilient spacer, holding a partition from a barrier, which may act to absorb sound waves.
- 347, for a member isolating a backing from support.
- 380+, for a cast in situ barrier having an isolated space filled with insulated material.
- 393+, for a component separated by a relatively yieldable spacer.

- 404.1+, for a construction with a nonsettable insulating material within a cavity.
- 573.1, for a structure having means accommodating dimension variation responsive to changing conditions, which means may also act as buffer to sound waves.

#### SEE OR SEARCH CLASS:

- 181, Acoustics, particularly subclass 30 and 290+ for a sound deadening unit, per se, even though it may be made of multiple layers, i.e., not including features for a building structure combination
- This subclass is indented under subclass 144. Structure wherein a perforated exposed sheet conceals a sound absorbing material.
- This subclass is indented under the class definition. Structure including an elongated rigid vertically extending primary structure, e.g., wall, column or post, which is held against a laterally applied force by a brace or guy which is outside of and extends away from the primary structure diagonally downward to a base for the primary structure, usually the earth.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

296+, for a footing.

- 651.01+, for a three dimensional openwork, e.g., skeleton tower, which often includes diagonal bracing between corner shafts.
- 720.1+, for a shaft structure of general application.

- 211, Supports: Racks, subclasses 119.01+ for a clothes line with isolated poles in which the poles may be guyed.
- This subclass is indented under subclass 146.

  Apparatus including (1) discrete guard member attached to the brace or guy and serving as a protector therefor or (2) such a guard, per se.
- This subclass is indented under subclass 146. Apparatus wherein the guy is a flexible strand, e.g., rope or cable.

- This subclass is indented under subclass 146.

  Apparatus including means to adjust the brace or guy.
- This subclass is indented under subclass 149. Apparatus in which the adjusting means is at or adjacent the point of contact of the brace or guy and the primary structure.
- This subclass is indented under subclass 149. Apparatus having a lateral tie between the brace and structure which tie is provided with an adjustment to vary the stress therein.
- This subclass is indented under subclass 146.

  Apparatus having braces which are spaced or angularly related to each other.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 148, for a flexible diagonal member which often requires a plurality of such members to properly guy the vertical structure.
- 153 This subclass is indented under the class definition. Structure including an elongated rigid structure (shaft) or its base having a rigid sheet form brace member mounted on and projecting outwardly thereof with the juncture of the shaft and member extending in the direction of the shaft axis, said member in use serving to resist lateral movement of the shaft relative to the earth.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

155+, for a shaft with a terminal earth piercing or expanding feature.

- This subclass is indented under subclass 153. Structure in which two or more of the projecting sheet form members are not in a single plane.
- This subclass is indented under the class definition. Structure including anchoring means having a component which in use is held below ground and which holds another component usually extending above the earth's surface, which means has (1) a feature for piercing the earth or (2) an anchor component which moves outwardly relative to the element held and

thereby acts to prevent or retard movement of the latter relative to the earth.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 153+, for a shaft with an embedded wing type brace.
- 166, for a "deadman" type anchor.
- 169.1+, for a residual construction having a defined terranean feature.
- 292+, for a wall or shaft footing.
- 679+, for a support for a reinforcing rod having a base penetrator with a limiting stop.
- 698+, for a residual anchor or tie acting between components of a building construction.

- 166, Wells, subclasses 206+ for an expansible anchor or casing operating in or as a well casing.
- 174, Electricity: Conductors and Insulators, subclasses 6+ for structurally related means acting to ground an electric charge to the earth.
- 175, Boring or Penetrating the Earth, subclasses 327+ for a bit or bit element adapted for boring or penetrating the earth.
- 248, Supports, subclass 85, 87, 156, and 545 for a support comprising a ground inserted anchor.
- 405, Hydraulic and Earth Engineering, subclasses 231+ for a pile to be driven into the earth, particularly subclass 244 for a process or apparatus for placing a shaft provided with laterally projecting structure to anchor the shaft; and subclasses 259.1+ for a structure for preventing undesired earth movement and provided with earth anchors to secure the structure to an earth formation.
- 411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 1 through 80 for an anchor or holding device in the form of an expansible member which merely cooperates with a preformed opening in a preformed component, e.g., a wall.

- This subclass is indented under subclass 155.

  Structure in which the below-ground components are discrete units each differing in kind and acting to prevent or retard translatory withdrawal or swinging movement of the structure as a whole after final positioning.
- 157 This subclass is indented under subclass 155. Structure having means attached to, extending outwardly of and inclined relatively to the longitudinal axis of the element held, which means penetrates and acts to pull the element into the earth or base when the element held is rotated.
- This subclass is indented under subclass 155.

  Structure in which a piercing element is attached outside of the anchored structure with the pierce being mounted for translatory movement relative to the anchored structure when it is driven into the earth.
- This subclass is indented under subclass 155. Structure in which an anchoring component is mounted for movement in a plane normal to the principal longitudinal axis of an elongated rigid structure held thereby.
- This subclass is indented under subclass 155.

  Structure including a movable cam or plate which acts to spread the movable anchor component relative to the parts to which it is attached.
- This subclass is indented under subclass 160. Structure in which the actuating means for the cam or plate includes a screw.
- This subclass is indented under subclass 155. Structure including a part including a barbed head or hook member movably connected through pivot means to the major component of the earth held means.
- 163 This subclass is indented under subclass 162. Structure in which the pivot means for the barb or hook member is substantially spaced from the terminals or edges thereof.
- This subclass is indented under subclass 162.

  Structure including a separate brace or tie which is pivotally connected between the harbor hook member and the part held by it.

- This subclass is indented under subclass 155.
  Structure including an elongated rigid member and a separate earth piercing section substantially axially aligned therewith and attached thereto.
- This subclass is indented under the class definition. Structure including means having a component which in use is buried below ground and holds another component which components are substantially different in kind and extend at substantially right angles to each other.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

155+, for a piercing or expanding type earth anchor.

#### 167.1 MEANS COMPENSATING EARTH-TRANSMITTED FORCE (E.G., EARTH-QUAKE):

This subclass is indented under the class definition. Structure including features (a) allowing motion between supported and supporting structures when a force is transmitted to the structure through the earth, (b) which compensate for earth motion without affecting structure supported by the earth, or (c) having means for absorbing or confining a force transmitted through the earth to a structure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 393+, for a resilient member sandwiched in between two opposed members.
- 573.1, for other constructions having means to provide dimensional variation responsive to changing conditions.

- 14, Bridges, appropriate subclasses, for roller bearing expansion devices which allow relative movement between the bridge structure and its support.
- 384, Bearings, for devices which reduce friction between relatively moving elements.

#### 167.2 Dynamic force generator:

This subclass is indented under subclass 167.1. Structure including active apparatus for producing counteractive accelerations in the mass of the building or in the mass of the apparatus which tends to nullify the effects of an earthquake.

 Note. Moving weights, sloshing liquids, pendulums, and eccentrically weighted flywheels are some examples of apparatus appropriate for inclusion in this subclass.

#### SEE OR SEARCH CLASS:

248, Supports, subclass 559 for general purpose moving weights which may be part of a vibration dampening means or attenuation system.

#### 167.3 Cross bracing:

This subclass is indented under subclass 167.1. Structure including an array of strategically placed members which triangulate an otherwise conventionally constructed building to minimize the tendency for that structure to rock when subjected to an earth-transmitted force.

## 167.4 Relative motion means between a structure and its foundation:

This subclass is indented under subclass 167.1. Structure including a means allowing movement between a static structure and its supporting foundation.

#### 167.5 Rolling support:

This subclass is indented under subclass 167.4. Structure wherein the means allowing motion comprises a rolling device (e.g., a ball bearing or a cylindrical bearing) between the structure and its supporting foundation.

#### 167.6 With damping or limiting means:

This subclass is indented under subclass 167.5. Structure including an additional means to retard movement of the structure or to confine or restrict movement of the structure relative to its supporting foundation.

#### 167.7 Elastomeric support:

This subclass is indented under subclass 167.4. Structure wherein the means allowing motion includes a deformable bearing surface of rub-

ber or a rubberlike supporting device positioned between the structure and the supporting foundation.

#### 167.8 With damping or limiting means:

This subclass is indented under subclass 167.7. Structure including an additional means to retard movement of the structure or to limit or confine movement of the structure relative to its supporting foundation.

# 167.9 Polymeric support structure (e.g., Teflon & 4121;):

This subclass is indented under subclass 167.4. Structure wherein the means allowing motion includes providing a supporting surface of polytetrafluoroethylene (PTFE or Teflon&4121;) or other similar polymeric substance between a structure and its supporting foundation.

This subclass is indented under the class definition. Structure including means for holding a supply of liquid which is attached to or is related to a building structure or building component, the liquid in this container acting to preserve or protect the structure.

#### SEE OR SEARCH CLASS:

- 137, Fluid Handling, subclasses 357+ for a fluid handling system of more general application which is installed in a building.
- 169, Fire Extinguishers, subclasses 5+ for fluid fire extinguishing systems installed in a building.
- 239, Fluid Sprinkling, Spraying, and Diffusing, subclasses 208+ for a building having a liquid supply means and a sprinkling, spraying or a diffusing device.
- 169.1 This subclass is indented under the class definition. Structure including a claimed feature of the earth or relationship to the earth, e.g., grade level, material between a wall and the earth, underground structures resisting external objects, position in the earth, etc.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

23+, for a structure with an exterior hold down anchored to the earth.

- 86+, for vertically curved arch with earth supported abutments.
- 102, for an earth supported type coping.
- 128+, for a shaft with diagonal earth engaging brace or guy.
- 155+, for a structure with earth piercing features.
- 167.1+, for a structure combined with means for compensating earth transmitted forces, e.g., earthquake.
- 274, and 292+, for a footing or footing combination.
- 741.11+, for a construction process utilizing the earth.

#### SEE OR SEARCH CLASS:

- 14, Bridges, appropriate subclasses for structure there provided for which carries traffic across an open space.
- 62, Refrigeration, subclass 260 for such systems with a subterranean feature.
- 89, Ordnance, subclass 36.01 for ordnance shields which may be underground.
- 137, Fluid Handling, subclass 234.6 for fluid systems with a vehicle guide or support, 236.1 for fluid distribution systems involving geos:graphic features and 363 for a ground supported enclosure for such a system.
- 165, Heat Exchange, subclass 45 for a heat exchanger structurally related to the earth
- 210, Liquid Purification or Separation, subclass 170, for such system combined with a geos:graphic feature.
- 405, Hydraulic and Earth Engineering, appropriate subclasses for a process or apparatus there provided for, particularly subclasses 53+ for underground fluid storage; subclasses 229+ for foundations which are not provided for elsewhere and methods and apparatus for constructing the same and subclass 258.1, specifically subclass 302.4 for a structure or method for preventing the earth from shifting.
- 169.11 This subclass is indented under subclass 169.1. Structure with means to control the transfer of heat between a building and the earth. The means can include a positioning of a building relative to a "frostline", i.e., the maximum depth of freezing.

**169.12** This subclass is indented under subclass 169.1. Structure for enclosing the space between the earth's surface and the floor of a mobile home.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

155+, for piercing or expanding earth anchors.

#### SEE OR SEARCH CLASS:

280, Land Vehicles, subclass 768 for trailer skirts.

- 169.13 This subclass is indented under subclass 169.1. Structure which is an elongated rigid substantially upright member, e.g., column, pole post, etc.
- 169.14 This subclass is indented under subclass 169.1. Structure provided with means, such as a lamina or coating, to prevent the passage of water through the floor or wall of the structure.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 169.5, for waterproofing means which includes a conduit, pipe or porous medium.
- This subclass is indented under subclass 169.1.
  Structure wherein 1) separate static structures,
  2) roads or pavements, 3) subdivided land areas, 4) naturally occurring geos:graphic landmarks, such as rivers, mountains, etc., or 5) any combination of 1) through 4) thereof, are established in a specified relationship to each other.
  - (1) Note. The mere fact that land is inclined is not considered a geos:graphic feature.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 169.4, for a single building positioned on inclined land.
- 169.3 This subclass is indented under subclass 169.2. Structure wherein the specified relationship is between at least two buildings or two subdivided land areas.
- 169.4 This subclass is indented under subclass 169.1. Structure wherein a structure is positioned on land which is inclined.

### 169.5 With drain or vent exterior to foundation perimeter:

This subclass is indented under subclass 169.1. Structure in which a fluid conducting means, such as a pipe, pipe system or a porous medium, facilitates the flow of water or air adjacent the outside of the static structure base but not beneath the base.

(1) Note. Under the basement or cellar floor drain or vent is classified elsewhere. See search notes below.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

198, for an enclosure or cover with a fluid guiding part between ambient and enclosed usable space.

302.1+, for a wall, ceiling, or floor with a passage for a gas or liquid.

#### SEE OR SEARCH CLASS:

52, Static Structures (e.g., Buildings), subclasses 302.3+, for an under the basement or cellar floor drain or vent

169.6 This subclass is indented under subclass 169.1. Structure which is underground and defines an enclosed usable space with portal means at or leading to the earth's surface. Included herein are root cellars, bomb shelters, tornado shelters, underground storage tanks and the like.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

19+, for enclosures having horizontal or inclined covers with an entrance for persons or objects.

#### SEE OR SEARCH CLASS:

109, Safes, Bank Protection, or a Related Device, for protective devices of that class.

169.7 This subclass is indented under subclass 169.1. Structure which is embedded in the earth and has an open top adjacent the earth's surface.

#### SEE OR SEARCH CLASS:

4, Baths, Closets, Sinks, and Spittoons, subclasses 488+ for a complete pooltype receptacle, and see note to Class 52 for line details.

169.8 This subclass is indented under subclass 169.7. Structure wherein the vertical walls which define the container structure have laterally spaced foundation elements with interconnecting means.

169.9 This subclass is indented under subclass 169.1. Structure which includes spaced column-like or pad-like discrete foundation elements in a building structure extending from the structure downwardly into the earth.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

155+, for a piercing or expanding earth anchor.

169.13, for a post related to the earth.

299, wherein a framework spans spaced footings.

170 This subclass is indented under subclass 169.1. Structure wherein an elongated rigid substantially upright member is provided with means defined as acting to reinforce it at or adjacent the earth's surface.

# 171.1 VIEWING PORT FOR SPECIFIC ENVIRONMENT:

This subclass is indented under the class definition. Structure in which a transparent panel is installed in a wall, ceiling, or floor of, usually, a high temperature or pressure chamber for the purpose of watching an operation.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

204.1+, for a window or door frame.

204.5+, for a window.

455+, for a door.

#### SEE OR SEARCH CLASS:

126, Stoves and Furnaces, subclass 200 for a heated stove door or window with a transparent panel.

# 171.2 VEHICLE-TYPE WINDSHIELD DEFOGGER OR DEICER:

This subclass is indented under the class definition. Structure in which a transparent panel is installed in an automobile, truck, airplane, train, etc., and includes means to either dissipate condensation or melt frozen water.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

397+, for edging around a window pane.

#### SEE OR SEARCH CLASS:

- 219, Electric Heating, subclass 203 for an electrically heated window.
- 237, Heating Systems, subclass 28 for such a system including a window heater.
- 296, Land Vehicles: Bodies and Tops, subclasses 84.1+ for a windshield on a vehicle body and top structure.

# 171.3 TRANSPARENT PANEL HAVING ACTIVE TREATMENT WITH GAS OR LIQUID:

This subclass is indented under the class definition. Structure in which a window includes means for altering opacity, translucence, insulating ability, or color, etc., of the window.

### SEE OR SEARCH THIS CLASS, SUB-CLASS.

204.5+, for a window.

#### SEE OR SEARCH CLASS:

- 15, Brushing, Scrubbing, and General Cleaning, subclasses 250.001+ for a window cleaning attachment, particularly subclasses 250.01+ for such a combination with material supply
- 62, Refrigeration, subclass 248 for a display-type refrigerator with condensate remover or preventer and subclasses 275+ for a refrigerator with an additional heater to prevent or remove frozen condensate caused by the refrigerating means.
- 454, Ventilation, subclass 85, 93, 95+, 121+, 128+, and 196+ for means for directing air relative to a window pane.
- This subclass is indented under subclass 171.3. Structure in which the treating is a sorbent for water vapor.

#### SEE OR SEARCH CLASS:

34, Drying and Gas or Vapor Contact With Solids, subclass 80, 81, 467, and 468 for a process of drying a gas and

- directing it relative to discrete articles for the purpose of treating the article.
- 96, Gas Separation: Apparatus, subclasses 108+ for solid sorbent apparatus, per se.

#### **173.1 COMBINED:**

This subclass is indented under the class definition. Structure in which claimed subject matter provided for in another class (e.g., heater) is incorporated with a static construction, a component thereof, or a panel structurally similar to a building panel.

(1) Note. Combinations relating to operative apparatus wherein an operating unit or significant characteristic for such a class is defined; e.g., electrical device or a burner, or wherein the enclosure is a furnace, a casing for a machine, a tool, etc.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

27+, for a static structure specifically modified to hold a disparate article.

#### SEE OR SEARCH CLASS:

- 62, Refrigeration, subclasses 259.1+ for a structural installation.
- 73, Measuring and Testing, subclass 431 for an instrument casing.
- 89, Ordnance, subclass 36.04 for shields for a fixed structure.
- 104, Railways, subclasses 27+ for terminals and stations.
- 174, Electricity: Conductors and Insulators, 158+ for insulator supporting or attaching means.
- 343, Communications: Radio Wave Antennas, subclasses 872+ for housings.
- 361, Electricity: Electrical Systems and Devices, subclasses 600+ for mounting assembly.
- 362, Illumination, subclasses 145+ with static structure.
- 451, Abrading, subclasses 451+ for a guard or housing for use with an abrading device.

#### 173.2 With a loading dock seal:

This subclass is indented under subclass 173.1. Structure in which an impact absorbing and weather sheltering device is secured to the

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static structure specifically for the reception of a vehicle, usually of a tractor-trailer type.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

2.12, for inflatable loading dock seals

# 173.3 With a sunlight activated device (e.g., passive solar or photoelectric):

This subclass is indented under subclass 173.1. Structure in which a solar energy collecting apparatus is an integral portion of the static structure but does not change the static structure or its arrangement.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

1, for a static structure controlled by condition responsive means.

#### SEE OR SEARCH CLASS:

- 126, Stoves and Furnaces, subclass 633 for a wall or floor constructed with a passage for solar heated fluid to warm a building and subclass 623 for a solar collector housing supported on a roof-type structure.
- 250, Radiant Energy, subclasses 200+ for photocells.
- 174 This subclass is indented under the class definition. Structure including means peculiar to the direction or control of vehicular or pedestrian surface traffic, e.g., curbs, sidewall guard rails or traffic strips.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 33, for installed furniture or fixtures defining a traffic path.
- 87, for a vertically curved arch construction combined with a superimposed deck.
- 184+, for steps with additional building structure which inherently guides traffic.

#### SEE OR SEARCH CLASS:

- 14, Bridges, for such a construction not principally of masonry or concrete.
- 404, Road Structure, Process, or Apparatus, subclasses 6+ for a traffic guide or barrier, per se, and subclasses 9+ for a traffic direction, per se.

This subclass is indented under subclass 174. Structure wherein different levels are formed by a continuous floor which is helical in structure or wherein the different levels are interconnected by an inclined passageway.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

185, for a multi-level building with steps. 236.1+, for another multi-level compartmented structure.

- 176 This subclass is indented under subclass 175. Structure wherein the inclined passageway means is positioned centrally of the building, usually forming a true helix or an interrupted helical core.
- This subclass is indented under the class definition. Structure including (1) a claimed exposed surface having a physical characteristic specialized to increasing friction or reducing wear caused by pedestrian or other traffic or (2) a separate member covering the end of a stair tread which member conforms to the nosing, i.e., that portion of the tread beyond a riser, for the purpose of reducing wear or increasing friction.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 182+, for (1) a stair construction wherein the member forming the permanent treads of the stairs may have a configuration defining a nosing which is integral with a stair component or (2) a stair covering combined with a stair construction or a tread covering having a defined feature other than for wear or friction reduction.
- 273, for an intersection having a flexible covering, e.g., carpeting.
- 327+, for a cast floor with additional coextensive section.
- 479+, for a facing held by a sustainer which may include plural layer flooring.
- 506.01+, for a facer attached to dissimilar substructure, e.g., linoleum or wood on a dissimilar sub-floor.
- 660+, for a fabric or lattice open-work not having a defined friction or wear surface feature.

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- 716.1+, for in situ attached channel or trim strip.
- 782.1+, for a composite panel.
- 800.1+, for a composite panel with an attached edging.

#### SEE OR SEARCH CLASS:

- 15, Brushing, Scrubbing, and General Cleaning, subclasses 238+ for a foot scraping mat.
- 16, Miscellaneous Hardware, subclasses 4+ for a carpet fastener wherein a barrier or stair component is only nominally defined.
- 51, Abrasive Tool Making Process, Material, or Composition, for an abrasive material or composition even though nominally defined as a wear or antislip surface.
- 404, Road Structure, Process, or Apparatus, subclasses 19+ for a pavement with an antislip surface.
- 428, Stock Material or Miscellaneous Articles, subclasses 98+ for a single or plural layer stock material product which is structurally defined, especially subclasses 141+ for a product having an irregular or nonuniform surface, subclasses 156+ for such a product in which at least one component varies in thickness, and subclasses 174+ for such a product in which at least one component is non-planar.
- This subclass is indented under subclass 177.

  Structure having means at the exposed edge of a stair tread or floor mat which protects the edge from wear or increases friction.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 182+, for stepped construction including uniform surfacing, e.g., carpeting covering plural successive treads and risers.
- 254+, for an intersection of cast stone-like material having a revealed embedded protector.
- 716.1+, for a panel of more general utility having a separately attached edging.

This subclass is indented under subclass 177. Structure having (1) spaced bars or strips which are twisted along their length or (2) a grating or perforated sheet having a feature forming a defined traffic carrying surface which is discrete with respect to the sheet or grating itself.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

660+, for another openwork lattice or fabric surface forming structure.

This subclass is indented under subclass 177.

Structure including (1) an element which is embedded in a settable material of (2) elements which are inserted into openings formed in a prefabricated sheetlike holder for the elements and which in the final product are exposed at the traffic receiving surface.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

318, for cast in situ barrier, e.g., floor, having revealed intersecting strips and see notes.

This subclass is indented under the class definition. Structure defining (1) a stepped structure, i.e., surfaces which are arranged in repetitious vertical and horizontal offset relationship or (2) a specific building structure having attached footholds or rungs.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 6+, for a construction with an auditorium, stadium or theater feature in addition to a mere stepped structure, e.g., a stepped structure with seat means.
- 179, for a tread nosing wear or anti-skid feature.
- 518+, for lapped multiplanar surfacing, e.g., shingled, in which surfacing sections are offset and lapped.

#### SEE OR SEARCH CLASS:

108, Horizontally Supported Planar Surfaces, subclasses 92+ for a terraced article supporting structure with a specific understructure.

- 182, Fire Escape, Ladder, or Scaffold, appropriate subclasses for a ladder, per se, with rungs, steps or treads in the plane of a stile or stringer but which lack a riser, i.e., a vertical closing plate between tread members.
- 256, Fences, subclass 22 for a stair rail (banister).
- 280, Land Vehicles, subclasses 163+ for a step structure specialized to vehicle use.
- 183 This subclass is indented under subclass 182. Structure having means forming a connection between at least two step forming components which allow relative movement between them, e.g., folding stairs.
- 184 This subclass is indented under subclass 182. Structure in which the stepped structure is formed in conjunction with or attached to a barrier or other component of an in situ erected building structure having a load bearing or shielding function.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

193, for liquid or fluent material container with a rod crossing a material port in a wall, which rod may serve as a rung.

#### SEE OR SEARCH CLASS:

- 182, Fire Escape, Ladder, or Scaffold, appropriate subclasses, particularly subclasses 90+ and 93+ for a floor or wall attached rung, step or ladder where no feature of construction other than that merely serving as a support for such elements is defined.
- This subclass is indented under subclass 184. Structure wherein the stepped means is combined with a building having floors at different levels.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

175+, for multilevel building with a spiral or ramp.

This subclass is indented under subclass 184. Structure including a movable closure means structurally related to the stepped structure.

- This subclass is indented under subclass 182. Structure in which the stepped structure is arranged around a vertical center line.
- 188 This subclass is indented under subclass 182. Structure in which a horizontal surface (tread) member, is supported above another discrete horizontal member, the latter being connected to a vertical front member (riser).
- 189 This subclass is indented under subclass 182. Structure in which at least one part, e.g., tread, riser or stringer, of the stepped construction is made of settable material which has set to rigidity before being used at the site.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

600+. for a reinforced cast module.

- This subclass is indented under subclass 189. Structure in which a tread and riser are cast as a monolith.
- 191 This subclass is indented under subclass 182. Structure in which the vertical components of the step structure are individually connected to an elongated member formed as a single component serving as the primary beam (stringer).
- This subclass is indented under the class definition. Structure including a container or receptacle structure, e.g., tank, bin or cistern particularly adapted to retain liquid or fluent solid materials and having a port, i.e., an opening in its outer barrier structure through which the material is either deposited within or withdrawn from the structure.

#### SEE OR SEARCH THIS CLASS, SUB-CLASS:

168, for a static structure combined with a protective liquid reservoir.

- 137, Fluid Handling, subclasses 154+, 356, 583, and 613 for an enclosure having more than one fluid handling port.
- 220, Receptacles, appropriate subclass for a receptacle having a port there provided for.

193 This subclass is indented under subclass 192. Structure in which the rods or ladder rungs cross the port and are usually secured to the side edges of the container or receptacle which form the port.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

184, for a building structure combined with means for a stair or ladder and see notes.

194 This subclass is indented under subclass 192.
Structure wherein the fluent material hopper or container is supported by legs or is otherwise elevated.

#### SEE OR SEARCH CLASS:

220, Receptacles, subclass 567 for an elevated tank for confining a fluid.

195 This subclass is indented under subclass 192. Structure wherein the container is provided with wall attached means forming an elongated passageway communicating with the material port.

#### SEE OR SEARCH CLASS:

193, Conveyors, Chutes, Skids, Guides, and Ways, subclasses 2+ for a chute, per se, or merely combined with enough structure to support it.

This subclass is indented under subclass 192. Structure in which the port is defined by a discrete frame structure mounted in the container or receptacle structure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

204.1+, for a construction having a feature for a closure or window opening.

- 197 This subclass is indented under subclass 192. Structure in which the port is located in the bottom, i.e., floor of the container or receptacle structure.
- 198 This subclass is indented under the class definition. Structure forming an enclosure for or a cover over a usable space (a room or compartment) and having a fluid guiding port in an outer barrier (wall, ceiling or floor) communi-

cating with the space and the ambient earth or

(1) Note. A door or window and/or opening therefor is not a fluid guiding port. See the search notes below for a construction with means forming such a portal opening.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

19+, for a closure with top entrance opening for persons or things.

192+, for a fluent material container with a port for the material.

204.1+, for construction with means forming a door or window and/or opening therefor.

220.1+, for a construction with service duct within a barrier.

270+, for a barrier construction with a fluid handling feature within the barrier.

503+, for barriers having a fluid passage formed by modules.

#### SEE OR SEARCH CLASS:

454, Ventilation, appropriate subclasses for a ventilating structure with air directing or controlling features other than mere windows.

199 This subclass is indented under subclass 198. Structure in which the port is within the roof or cover of the enclosure and acts to vent the space below the roof or cover.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

64+, for construction with a barrier or mounted for repositioning, e.g., hinged roofs or skylights wherein the hinged roof is a movable section.

#### SEE OR SEARCH CLASS:

454, Ventilation, appropriate subclasses, particularly subclasses 1+ and 339+ for building with air guiding or forcing means.

200 This subclass is indented under the class definition. Structure including means forming an enclosure located on and within the periphery of a roof and having an open bottom or passage communicating with the space beneath the roof.

(1) Note. Where the entire cover structure is considered a skylight (e.g., greenhouse roof), the claims should be classified under the appropriate cover structure; e.g., compound curve cover, inclined cover.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 18, for a clerestory or sawtooth type roof.
- 72, for a cupola or roof section mounted for repositioning.
- 80.1+, for a compound curve cover construction, e.g., dome.
- 90.1+, for an inclined roof or rafter with supporting substructure.
- 202+, and 204.1+, for a construction relating to a window or door through a barrier.

#### SEE OR SEARCH CLASS:

- 454, Ventilation, appropriate subclasses, particularly subclasses 339+ for a related structure combined with an air directing or control means.
- This subclass is indented under the class definition. Structure including a generally, U-shaped enclosure extending outwardly of a building wall and having an open side facing the interior of a building.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

73+, for a guyed or cantilevered barrier, e.g., a cantilevered bay window.

This subclass is indented under the class definition. Structure including (1) two panels of different size, the smaller of which protects and is attached to, facially contacts, or is sealed to the surface of the larger panel or to a frame surrounding the larger panel, or (2) a panel which is attached to the outside of a barrier and which protects and covers an opening in the barrier, which opening is occupied by another, usually permanent, panel, e.g., storm panels over permanent windows.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 204.1+, for another construction defining or relating to an opening through a barrier, particularly subclasses 204.5+ for a window with attached bars or the like acting to reinforce the glass.
- 476, for a cornered frame with a releasable facer retainer, e.g., for holding a window light in a surrounding framing section for it.
- 479+, for a barrier construction having facially opposed surfacing sections.
- 483.1+, for a facer abutting and concealing a frame.
- 506.01+, for a facer attached to another dissimilar in situ erected type structure.

#### SEE OR SEARCH CLASS:

- 49, Movable or Removable Closures, subclasses 50+ for a protective grille which overlies a main closure, one of which is movable or removable and subclasses 61+ for an auxiliary closure which overlies a main closure one of which closure is movable or removable.
- 203 This subclass is indented under subclass 202. Structure wherein a transparent, relatively smaller, auxiliary pane or film is mounted on and contacts or is sealed to an exposed surface of a main pane, usually removably.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 204.52, for a double pane panel having a drain or vent to the ambient atmosphere.
- 396.01+, for a structure including plurality of facially spaced similar panels held apart by a resilient separator.
- 788+, for a unit including parallel panes, i.e., double glass panels, usually held by a peripheral frame.

#### SEE OR SEARCH CLASS:

296, Land Vehicles: Bodies and Tops, subclasses 97.1+ for glare shields attached to a windshield or its frame.

# 204.1 FRAMING TO RECEIVE DOOR, DOOR JAMB, OR WINDOW SASH:

This subclass is indented under the class definition. Structure having defined structure outlining a passageway which traverses a barrier (e.g., wall), said passageway is designed for a means which allows access of light, air, people, or a pet.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 19+, for a roof with an entrance way through it.
- 64+, for a barrier section mounted for repositioning.
- 85, for a curved arch type doorway.
- 97, for an outwardly extending liquid projector including a window sill having a claimed feature for this function.
- 171+, for a transparent panel for a specific environment.
- 186, for a closure related to a stair.
- 200, for a cupola or skylight above a roof.
- 201+, for a bay window.
- 202+, for an auxiliary shield and/or main panel or frame arrangement.
- 220.1, for a service duct with a lateral outlet.
- 302.1+, for a structure with a vent or passage to its interior; e.g., a wall drain.
- 306+, for a structure with a translucent block or embedded translucent component.
- 473, for a louvered panel.
- 633+, for a foraminous structure; e.g., repetitious members defining the peripheries of openings.

#### SEE OR SEARCH CLASS:

- 16, Miscellaneous Hardware, subclasses 193+ for sash structure.
- 49, Movable or Removable Closures, subclass 504 for a frame member insertable in an opening having means adapting the member for use with a closure; e.g., a stop.

#### **204.2** Lintel:

This subclass is indented under subclass 204.1. Framing defining a load bearing generally horizontal member spanning an opening.

# 204.5 WINDOW OR WINDOW SASH, SILL, MULLION, OR GLAZING:

This subclass is indented under the class definition. Structure defining a framework surrounding at least one piece of transparent material (as glass) for the admission of light.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 107, for a below grade wall for a portal opening.
- 171.1+, for a transparent panel for a specific environment.
- 201, for a bay window.

#### SEE OR SEARCH CLASS:

49, Movable or Removable Closures, subclass 380 for a window and frame or sash transferable as a unit.

#### 204.51 Having a fixed pane and a movable pane:

This subclass is indented under subclass 204.5. Window comprising a stationary portion and a displaceable portion.

#### **204.52** With a plug:

This subclass is indented under subclass 209. Drain or vent in which a distinct device closes the sash or window frame fluid conveying means.

# 204.53 Architrave; i.e., molding or finish strip touching pane face:

This subclass is indented under subclass 204.5. Window including a strip form element which extends over the pane face (the art term being "the architrave") so that the plane of the strip form element intersects the plane of the surface defining a window opening, i.e., the strip form element covers and outlines the portion of the wall face that intersects the surface defining the inside of a window frame.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

58+, for flashing.

716.1+, for molding strips.

#### 204.54 Separable and lapped sections:

This subclass is indented under subclass 204.53. Architrave wherein the strip form element comprises two sections covering a major portion of the pane with the sections being in

face-to-face lapped relationship with each other.

# 204.55 Sash having integral securing means (e.g., nailing strip):

This subclass is indented under subclass 204.5. Window in which the framework includes a portion, usually with holes or slots, for fasteners to attach the framework to the wall.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

211+, for an architrave.

#### 204.56 For size adjustment:

This subclass is indented under subclass 204.55. Securing means including means to adjust the framework to the size of the wall opening.

#### SEE OR SEARCH CLASS:

49, Movable or Removable Closures, subclass 505 for a means to alter the relative a position of the closure frame components or the closure frame to a wall.

# 204.57 Intersection of panes having coextensive exposed sustainer (i.e., corner):

This subclass is indented under subclass 204.5. Window in which a juncture member that connects two panes along their length or width is visible to an observer.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 282.1, for an exposed intersection member for panels or modules.
- 287, for a sheetlike trim member at an intersection.
- 764+, for coplanarily arranged sections having a framing member between and separating the section edges and having an interfitting configuration between the framing member and the section.

#### SEE OR SEARCH CLASS:

- 109, Safes, Bank Protection, or a Related Device, subclass 79 for vault corners.
- 217, Wooden Receptacles, subclass 65 for box corners.
- 403, Joints and Connections, appropriate subclasses for just a corner connector.

### 204.58 Finite tie for intersection of panes (i.e., corner):

This subclass is indented under subclass 204.5. Window in which a juncture member connects two panes along their length or width.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

712+, for a sheet and wire tie of more general application.

#### SEE OR SEARCH CLASS:

- 109, Safes, Bank Protection, or a Related Device, subclass 79 for vault corners.
- 217, Wooden Receptacles, subclass 65 for box corners.
- 403, Joints and Connections, appropriate subclasses for just a corner connector.

# 204.59 Ornamental-type; e.g., stained glass or mosaic-type:

This subclass is indented under subclass 204.5. Window wherein the panes of glass are (1) colored or (2) cut in unique shapes and fitted into a sash.

#### 204.591 Spacing pane from disparate edging:

This subclass is indented under subclass 204.5. Structure in which the separator member or a part thereof acts to space the edge or face of a window pane from a section or component of a strip-like member positioned at its edge, which section or component (e.g., a sash component), acts to hold or retain the panel.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

785+, for sandwich or hollow panels.

#### 204.593 At least two spaced panes:

This subclass is indented under subclass 204.591. Structure including at least two similar panels held in facially spaced parallel relationship by the separator member.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

204.52, for a double pane vented panel.

811+, for another composite panel formed by facially spaced panes.

#### 204.595 Spaced by unitary or contacting U-channels:

This subclass is indented under subclass 204.593. Structure in which the separator means is either a single unitary member or plural members in side-by-side contact which have two or more U-shaped channels, each of which overlaps the edge and adjacent faces of a different one of a pair of laterally spaced panels.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

204.597, for single U-shaped channel overlapping edge and face of a panel.

811+, for a parallel spaced pane or panel.

823+, for a panel, per se, with U-shaped edging.

#### 204.597 Overlapping edge and face of pane:

This subclass is indented under subclass 204.591. Structure in which one of the separated components of a panel, usually a glass pane, is separated from an adjacent component by means which covers the edge and adjacent areas of the faces of the panel (e.g., a U-shaped strip).

## SEE OR SEARCH THIS CLASS, SUBCLASS:

204.595, for similar devices spacing plural panels

811+, for a parallel spaced pane panel.

823+, for panel, per se, with disparate U-shaped channel edging.

#### 204.599 Metallic spring (e.g., strip separator):

This subclass is indented under subclass 204.591. Structure wherein the resilient separator is a metallic spring, frequently a longitudinally deformed metallic strip.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

769, for a springy strip panel retainer which does not act as a separator.

#### 204.6 Multiple panes within a sash:

This subclass is indented under subclass 204.5. Window in which at least two window pieces are positioned in one peripheral framework.

#### 204.61 Decorative grill attached to sash:

This subclass is indented under subclass 204.5. Window in which a lattice type structure is fastened to the sash presenting a multiple pane appearance.

# 204.62 Attaching means securing a pane to a sash member or to another pane:

This subclass is indented under subclass 204.5. Window wherein (1) a distinct member fixes a pane to the framework or (2) a distinct member completely separates two adjacent panes in the same plane.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

235, for a curtain wall.

764, for a wall, ceiling, or floor section separated by a framing member.

#### 204.63 Sash piercing element (e.g., glazing points):

This subclass is indented under subclass 204.62. Window securement wherein the pane retaining means includes a member which pierces the framework to fix the pane in position.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

765, for wall, ceiling, or floor framing or section piercing means.

#### 204.64 Including cam or wedge:

This subclass is indented under subclass 204.62. Window securement wherein the pane retaining means includes (1) a rotating or sliding piece that imparts motion to a pin free to move in a groove or (2) a rectangular-shaped piece that tapers to a thin edge.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

766, for a wall, ceiling, or floor section with attaching means that has a cam or wedge.

# 204.65 Clamped against pane by turning cam engaging screw:

This subclass is indented under subclass 204.64. Window securement cam including a screw which engages the surface of the rotating or sliding piece that imparts motion to a pin free to move in a groove and which, when

turned, in cooperation with said piece causes a retaining element to press against the pane.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

767, for a wall, ceiling, or floor section clamped to framing by turning a cam engaging screw.

#### 204.66 Pivots or includes pivoting actuating means:

This subclass is indented under subclass 204.62. Window securement wherein the pane retaining means is (1) mounted for rotational motion or (2) includes a rotating part which moves a retainer into its retaining position adjacent the pane.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

768, for a wall, ceiling, or floor section including a pivotable attaching means.

### 204.67 Contacting pane front and back then fastens to sash:

This subclass is indented under subclass 204.62. Window securement wherein separate retaining members, either angularly, or curvilinearly shaped, touch opposite faces of a pane, said members, or one of said members being interconnected by a separate fastener to the framework.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

770, for a wall, ceiling, or floor section attaching means that contacts section front and back faces then is fastened to a frame member.

### 204.68 Interconnected by intermediate member and fastener:

This subclass is indented under subclass 204.67. Window securement connector including at least one separate element located between the retaining members and mutually joined by at least one fixing means such as a screw.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

771, for a wall, floor, or ceiling section attaching means contacts section front and back faces then is fastened to a

frame member by an intermediate member and fastener.

### 204.69 Pane to sash attaching means resiliently biased:

This subclass is indented under subclass 204.62. Window securement wherein the pane retaining means is formed of springy thin-walled material or is made of wire, said retaining means being flexed when in its pane retaining position so as to press the pane into a predetermined position.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

773, for a wall, ceiling, or floor section attached to frame by a resiliently biased member.

### 204.7 With attaching means element received in channel or aperture in sash:

This subclass is indented under subclass 204.62. Window securement wherein a portion of the pane retaining means is situated either in (1) an opening extending through the framework or (2) in a groove in the framework.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

775, for a wall, ceiling, or floor section attaching element received in a frame channel or aperture.

#### 204.705 Solid three-sided glazing strip:

This subclass is indented under subclass 764. Structure wherein the pane retaining means consists of a solid strip having a triangular shape and used for holding a pane against a sustainer in a window.

# 204.71 U-shaped channel formed of separate strips overlapping pane edge, front, and back:

This subclass is indented under subclass 204.5. Window wherein the periphery of the window has independent members forming the letter "U" which cover both the pane thickness and extend over a portion of both major faces.

# 204.72 With mechanical fastener for securing strips:

This subclass is indented under subclass 204.71. Channel in which a bolt, screw, etc., is used to fix the members to the sash.

205 This subclass is indented under subclass 204.1. Structure including a partition on the inside of an enclosure, which partition has the passageway therethrough.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

238.1+, for another construction wherein an interior type partition is used.

This subclass is indented under subclass 204.1. Structure in which the barrier construction is a wall having means defining plural, separate passageways.

#### SEE OR SEARCH CLASS:

49, Movable or Removable Closures, subclasses 95+ for closures in spaced openings along a barrier and interconnected for concurrent movement.

207 This subclass is indented under subclass 204.1. Structure including a barrier having crossing or intersecting elongated members defining plural areas some of which are occupied by fixed panels, e.g., panes, and at least one being a passageway occupied by a movable floor or window.

208 This subclass is indented under subclass 204.1. Structure including a panel and means for attaching it over or in a passageway in a barrier by adhering or clamping it in contact with the major face of the barrier or in contact with a seal sandwiched between said face and the panel.

209 This subclass is indented under subclass 204.5. Structure including means for draining or venting the surface between the opposed barrier faces, e.g., the space within a barrier behind a door or window frame.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

302.1, for a drain, vent or vent plug combination of more general application.

#### SEE OR SEARCH CLASS:

49, Movable or Removable Closures, subclass 408 for a drain in the guide or sash of a sliding closure, subclass 471 for a threshold with a drain or

vent and subclass 476.1 for a closure seal with a fluid drain or a closure face mounted deflector.

210 This subclass is indented under subclass 204.1. Structure wherein the framing of a door or window opening is directly attached to the studding of a wall or wherein the studding itself is part of the passageway frame.

211 This subclass is indented under subclass 204.1. Structure including a strip from element, which extends over the barrier face (the art term being "the architrave") so that its plane intersects the plane of the surface defining a door or window opening (the art term for this surface being "the reveal"), i.e., the strip form element covers and outlines a portion of a wall face intersecting the surface defining the inside of a door or window frame.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

716.1+, for molding strips and see notes.

- 212 This subclass is indented under subclass 211.

  Structure wherein the strip-form element comprises two sections covering a major portion of the reveal with the sections being in face-to-face lapped relationship with each other.
- 213 This subclass is indented under subclass 204.1. Structure having framing means defining the passageway, which means differs in kind from that forming the barrier and including means rigidly and permanently connecting together the means and the means defining surface forming the opening through the barrier (reveal).

#### SEE OR SEARCH THIS CLASS, SUB-CLASS:

211+, for a reveal and a border strip extending over the barrier surface (architrave).

This subclass is indented under subclass 204.55. Structure including (1) a resilient strip (2) a fastening device, held between the reveal and the framing means.

215 This subclass is indented under subclass 213.
Structure having sub- framing means to be enclosed by framing means defining the opening.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

364+, for a penetrating receiver ground member construction where no feature forming a frame is defined, i.e., where the ground member may be defined as a "buck" of "frame member".

216 This subclass is indented under subclass 213. Structure in which the means defining an opening has a foraminous portion embedded in a plastic to-rigid settable material, e.g., plaster.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

255+, for a cast in situ embedded protector for a corner.

660+, for a fabric or lattice surface forming type sheet which may be used as an embedded reinforcement.

This subclass is indented under subclass 213. Structure including means to adjust the frame to the size of the passageway.

#### SEE OR SEARCH CLASS:

49, Movable or Removable Closures, subclass 505 for a means to alter the relative position of the closure frame components or the closure frame to a wall.

This subclass is indented under the class definition. Structure comprising tubular means confining gaseous products and including means directing a gaseous fluid (air or other gas) therein to or therefrom.

#### SEE OR SEARCH CLASS:

110, Furnaces, subclass 184 for a metal smokestack peculiar to solid fuel burning furnaces.

126, Stoves and Furnaces, subclasses 500+ for a flue construction including a fireplace and subclasses 307+ for a stovepipe peculiar to that class.

454, Ventilation, subclasses 1+ for a chimney or stack which conducts air or products of combustion between a ventilated space and the surrounding environment.

This subclass is indented under the class definition. Structure including tubular means guiding gaseous products, a specific building structure and connecting means therebetween.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

218+, for flue structures combined with a gaseous fluid director there provided for.

#### SEE OR SEARCH CLASS:

285, Pipe Joints or Couplings, subclasses 42+ for a combined flue and roof flashing, per se.

# 220.1 WALL, CEILING, OR FLOOR DESIGNED FOR UTILITIES:

This subclass is indented under the class definition. Structure in which a distinct duct-type path for water, fuel, heating fluid, cooling fluid, or electrical systems is an integral part of the barrier.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

34+, for an installed lavatory fixture.

95, for a roof end structure with conduit or passage means.

192+, for liquid or fluent material container with material port.

209, for window with drain or vent.

219, for a flue connection to a specific building structure.

302.1+, for a barrier construction within exteriorly opening fluid handling feature.

503+, for a barrier with a through fluid passage formed by the component modules of the barrier.

533+, for a lapped surfacing with fluid handling feature in the joint.

553, for a lapped multiplanar surfacing with an interior space.

#### SEE OR SEARCH CLASS:

62, Refrigeration, subclasses 440+ for a cooled enclosure having means or a relationship of components special-

ized to refrigeration, particularly subclass 451 for a duct confining a flowing coolant and covered by insulation means.

- 126, Stoves and Furnaces, subclass 633 for a wall or floor constructed with a passage for solar heated fluid to warm a building.
- 137, Fluid Handling, subclass 234.6 for a fluid handling system related to a vehicle guide or support, subclass 236.1 for such a system related to a geos:graphical feature and subclass 343 for such a system in a static structural installation.
- 138, Pipes and Tubular Conduits, subclasses 156+ for ducts.
- 165, Heat Exchange, subclasses 53+ for a specific heat exchanger structurally installed in a wall, ceiling, or floor.
- 174, Electricity: Conductors and Insulators, subclasses 48+, 50+, and 68.1+ for a passageway specifying electrical features; e.g., a wire.
- 220, Receptacles, subclass 3.2 for an outlet or junction box even though a mere connection to a buried conduit may be defined.
- 237, Heating Systems, subclass 69 for a heating system including a duct in a floor
- 285, Pipe Joints or Couplings, subclass 64 for a pipe joint supported by an element of a building construction.
- 454, Ventilation, subclasses 270+ for a hollow wall structure with air distributors; e.g., inlet to space.

# 220.2 Load-bearing, prefabricated, abutting units with aligned utility passages:

This subclass is indented under subclass 220.1. Unit which is constructed with; e.g., ducts that, upon assembly, line up with a matching unit to receive a utility therethrough.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

302.2, for drain or vent with an aligned passage.

#### 220.3 Multiple passageway or multicellular loadbearing units (e.g., grid or two parallel pipes in a slab):

This subclass is indented under subclass 220.1. Unit containing (1) two parallel duct-type paths or (2) a network of uniformly arranged horizontal and perpendicular spaces.

#### 220.4 Corrugated type:

This subclass is indented under subclass 220.3. Unit in which the paths are defined by alternating parallel ridges and grooves.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

783.11+, for a corrugated sheet.

# 220.5 Completely accessible continuous trench duct type:

This subclass is indented under subclass 220.1. Floor containing an opening that runs the length or width thereof and is covered to provide a planar trafficable surface.

#### 220.6 Suspended ceiling:

This subclass is indented under subclass 220.1. Ceiling in which the utilities are carried in a space beneath a floor and sheetlike elements held by a grid hanging from the floor.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

506+, for suspended ceilings.

#### 220.7 Partition type (e.g., raceway arrangement):

This subclass is indented under subclass 220.1. Wall in which the utility is in demountable panel-type or modular-type structures.

# 220.8 Having a passageway through the entire wall, ceiling, or floor thickness (e.g., pokethrough):

This subclass is indented under subclass 220.1. Wall, ceiling, or floor in which an opening, made at the smallest wall, ceiling, or floor dimension, provides access from one side of; e.g., a wall, to the other side for the utility to pass through.

This subclass is indented under the class definition. Structure including an exposed facing sheet which is attached to another structure which sheet is defined as (1) being under tension, (2) flexed or (3) defining that the other structure has means operating to pull on the sheet, the sheet acting to stress a substructure or frame so that the components of the assembly act to strengthen the structure as a whole.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 179+, for a stair tread nosing which may be formed by a tensioned sheet, e.g., carpet.
- 223.1+, for a precompressing, e.g., prestressing construction.
- 273, for a flexible barrier covering which may be stretched to hold it flat.

# 223.1 WITH COMPONENT HAVING DISCRETE PRESTRESSING MEANS:

This subclass is indented under the class definition. Structure including a compressive preloading of a static structure or portion thereof by either a pre-tensioning or post-tensioning member to reduce or eliminate tensile stress.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 222, for a tensioned sheetlike facing.
- 231, for a related structure having means stretching the reinforcement but not applying compressive stress to the material.
- for an adjustable stressing means acting to correct warp.
- 600+, for a module with embedded reinforcement
- 721.1+, for a sustainer with a feature for resisting transverse loading; e.g., monolith with eccentric reinforcing.

#### SEE OR SEARCH CLASS:

- 29, Metal Working, subclasses 446+ for a process of assembly and/or joining involving prestressing of a part, particularly subclass 452 for prestressing of a rod, filament, or strand.
- 264, Plastic and Nonmetallic Article Shaping or Treating: Processes, subclasses 228+ for processes there provided for involving precompressing.

# 223.11 Connecting adjacent ends of monolithic beam or girder:

This subclass is indented under subclass 223.08. Beam, girder, or truss in which preformed, independent, separately reinforced structural members are joined by the prestressing means to form a continuous type of structural element (i.e., continuous beam).

#### 223.12 Homogenous design (e.g., all metal):

This subclass is indented under subclass 223.8. Beam, girder, or truss in which the structural element including the prestressing means is fabricated from a single material (e.g., steel).

#### 223.13 Anchorage (e.g., end):

This subclass is indented under subclass 223.1. Preloaded structure including a device for holding the prestressing means after tensioning.

#### SEE OR SEARCH CLASS:

- 24, Buckles, Buttons, Clasps, etc., subclass 122.3, 122.6, and 127 for strand holder of general application.
- 254, Implements or Apparatus, for Applying Pushing or Pulling Force, subclass 29 for an apparatus applying tension to a rod or strand.
- 403, Joints and Connections, subclass 314 and 365+ for an end coupler including wedging or camming means and interfitted members including radially interposed shim or bushing, respectively.

#### 223.14 Specific prestressing means:

This subclass is indented under subclass 223.1. Preloaded structure in which significance is attributed to the tensioning member.

#### 223.2 Pressure vessel:

This subclass is indented under subclass 223.1. Preloaded structure comprising a specialized container that is specifically designed to withstand, over the entire interior face, a fluid force that is substantially greater than normal atmospheric conditions.

#### SEE OR SEARCH CLASS:

220, Receptacles, subclasses 565+ for stationary tanks.

### 223.3 Tubular shaped tank, silo, cooling tower, etc.:

This subclass is indented under subclass 223.1. Preloaded structure which is vertically extending, has a generally circular cross-section, and strengthened to reduce the effect of radial forces.

# 223.4 Axially loaded vertical structure (e.g., column, derrick):

This subclass is indented under subclass 223.1. Preloaded upright structure which is strengthened along an axis perpendicular to or at a high angle to the earth's surface.

#### 223.5 Composed of stacked sections:

This subclass is indented under subclass 223.4. Upright structure which is made up of a plurality of preformed sections placed one on top of the other.

#### 223.6 Slab or panel construction:

This subclass is indented under subclass 223.1. Preloaded structure which is an architectural element having a generally flat surface (e.g., wall, floor, or ceiling section) and is strengthened to overcome forces in either the vertical or horizontal direction.

### 223.7 Composed of abutting modular panels or blocks:

This subclass is indented under subclass 223.6. Slab in which the architectural element is made up of a plurality preformed sections.

#### 223.8 Beam, girder, or truss construction:

This subclass is indented under subclass 223.1. Preloaded structure which is a distinct generally horizontal structural member strengthened along a major or minor axis to counteract forces from additional loads (e.g., floor, roof).

#### 223.9 Composed of abutting sections:

This subclass is indented under subclass 223.8. Beam, girder, or truss which is made up of a plurality of preformed sections.

This subclass is indented under the class definition. Structure including a cast type structure having a sustainer supporting the structure and additional reinforcing means cooperating with the material, which additional reinforcing means including means associated therewith to stretch or tension them.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 223.1+, for a cast material with means precompressing it.
- 240, for a partition between rooms combined with tensioning means.
- 414, for a monolithic cast in situ barrier with sustainer and untensioned embedded reinforcement.
- This subclass is indented under the class definition. Structure including (1) a component in one layer which reacts chemically with a component of another layer or (2) a component which irreversibly changes in physical or chemical structure other than a mere dimensional change with variations in ambient conditions, e.g., heat or moisture.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 1, for means responsive to a condition to control movement of a component.
- 573, for a structure allowing mere expansion or contraction in response to a change in an ambient condition.

- 106, Compositions: Coating or Plastic, subclasses 15.05+ for a fireproofing, biocidal or antifouling composition there provided for.
- 252, Compositions, subclasses 2+ for a fire extinguishing composition there provided for.
- 285, Pipe Joints and Couplings, subclasses 2+ for pipe joints with safety release and subclass 187 for temperature responsive pipe joints.
- 428, Stock Material or Miscellaneous Articles, subclasses 920+ (a cross-reference art collection) for a product having a heat or fire protective coating or impregnation.
- 233 This subclass is indented under the class definition. Structure including shaft-like elements held in edge-to-edge relationship which (1) present coplanar curved exposed faces exhibiting grooves between them, (2) have terminal ends projecting beyond the limits of the inter-

section or (3) constructions defined as imitating a log wall construction.

#### SEE OR SEARCH CLASS:

446, Amusement Devices: Toys, subclass 106 for a toy log house.

This subclass is indented under the class definition. Structure defining plural areas formed by subdividing a larger area, which areas function to shelter or enclose a person, animal or a movable object.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 6+, for a construction with means defining a stage or arena area.
- 29+, for a structure where a horizontal surface type article may move into a compartment.
- 33, for a structure wherein installed fixtures, e.g., store shelving, define a traffic path.
- 64+, for a construction wherein a wall, floor or roof may move to subdivide a larger area.
- 79.1+, for a preassembled subenclosure specialized to assembly to form a large building.
- 106, for a residual jail type structure.
- 185, for a multilevel building with stairs.
- 201, for a bay window construction.
- 205, for a portal in an interior partition.
- 235 This subclass is indented under subclass 234. Structure in which the outside or sheathing wall of a building includes preformed panels which are supported in crossing relationship to the terminal outside edge of a floor or by the load bearing beams or columns which define the outside limits of the building frame by attachment of the panels.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 236.3+, for another construction having floors at plural levels.
- 483.1+, for another construction wherein a facer (panel) is held laterally of a repositioned elongated rigid member, a stud or column.

236.1 This subclass is indented under subclass 234. Structure in which at least one compartment is nonrectangular in shape.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 80.1+, for a compound curve cover, e.g., dome.
- 85+, for a curvilinear entrance archway.
- 89+, for a vertically curved arch.
- 245, for another construction forming a curvilinear barrier.
- 639+, for a curvilinear or peaked truss.
- 236.2 This subclass is indented under subclass 236.1. Structure wherein at least one wall of the non-rectangular structure is curvilinear in shape.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 79.4, for a prefabricated nonrectangular subenclosure.
- 245. for a curvilinear barrier.
- 236.3 This subclass is indented under subclass 234. Structure wherein the enclosed areas are on different vertically spaced levels, e.g., multistory buildings.
- 236.4 This subclass is indented under subclass 236.3. Structure wherein two or more enclosed areas arranged in such a manner that each unit is vertically offset (higher or lower) with respect to its adjacent unit, but not directly above or below its adjacent unit.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 79.2, for vertically staggered prefabricated subenclosures.
- 236.5 This subclass is indented under subclass 236.3. Structure wherein a substantial portion of the vertical walls of at least two adjacent levels and the floor-ceiling barrier therebetween are cast as a single monolithic structure, e.g., poured concrete.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

250+, for cast, stone-like intersection.

236.6 This subclass is indented under subclass 236.3. Structure wherein a horizontal barrier (floorceiling) is disposed between the upper and lower edges of a vertical barrier (wall).

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

283, for the intersection of a barrier seated on a projection.

236.7 This subclass is indented under subclass 236.3. Structure wherein horizontal barrier (floor-ceiling) is disposed between two vertically spaced distinct walls or columns.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

262+, for a barrier resting on walls or floor supporting walls.

- 236.8 This subclass is indented under subclass 236.7. Structure wherein a portion of the horizontal barrier has a cast in situ component at the juncture with the vertical walls or columns.
- 236.9 This subclass is indented under subclass 236.3. Structure having distinct walls or columns in vertically aligned end-to-end relationship and a horizontal barrier (floor-ceiling) at and spanning the juncture.

### 238.1 Partition secured to and crossed by preconstructed barrier:

This subclass is indented under subclass 234. Structure wherein the enclosed areas (i.e., compartments) are formed by a vertical partition secured to and crossed by an intermediate portion of at least one in situ preconstructed wall, ceiling, or floor.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

64+, for a partition mounted relative to a base for repositioning without being totally disconnected therefrom.

#### SEE OR SEARCH CLASS:

- 105, Railway Rolling Stock, subclass 375 for auxiliary freight car floors.
- 114, Ships, subclass 116 for ship bulkheads.

- 160, Flexible or Portable Closure, Partition, or Panel, subclass 351 for portable partitions.
- 405, Hydraulic and Earth Engineering, subclass 283 for a movable shield used in trench excavation.
- 239 This subclass is indented under subclass 238.1. Structure wherein the partitions which form the compartments terminate in spaced relationship to a floor or ceiling.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

70, for a collapsible structure which may form collapsible cubicle, e.g., voting booth, but which remains connected to a wall.

240 This subclass is indented under subclass 238.1. Structure including supporting means which are tensioned or drawn taut by means acting between spaced preconstructed barriers.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 223.1+, for a construction including tensioned reinforcement means which compresses the construction.
- 231, for a cast monolith including a sustainer and means tensioning an additional reinforcement.
- 241 This subclass is indented under subclass 238.1. Structure including a distinct elongated member fixed to or resting on a ceiling and/or floor with the construction forming the vertical partition proper being coextensive with and terminating at its top and/or bottom at the member.
- 242 This subclass is indented under subclass 241. Structure including a trim-type plate or strip which is interfitted with either the terminal member or with a clip which retains said plate or strip relative to the terminal member.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

290, for strip sections with an end of a sustainer therebetween which are usually a part of the type of construction in this subclass.

243 This subclass is indented under subclass 238.1. Structure including a plurality of separate rigid elongated members (sustainers) extending between and individually connected to the preconstructed barriers.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

690+, for shafts held side-by-side by spacers, e.g., a truss.

#### 243.1 Movable element on partition engages overhead barrier; i.e., ceiling, to secure partition in place:

This subclass is indented under subclass 238.1. Structure wherein a body mounted on the vertical partition shifts into contact with an intermediate portion of a ceiling to hold the vertical partition in position between that portion and an intermediate portion of a floor beneath the vertical partition.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

126.3+, for a vertical partition which is lifted into engagement with the ceiling.

244 This subclass is indented under the class definition. Structure including means defining a cap which in use is mounted on and covers the exposed terminal edge of a barrier which encloses a space, e.g., chimney top guards.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

103, for markers or monuments which may include capped stones, slabs or posts.

300+, for another vertical structure with an upper terminus bearing plate or cap.

245 This subclass is indented under the class definition. Structure including a barrier, e.g., wall, which has its opposite faces both curvilinear and substantially parallel or a module specialized to use in forming such a barrier.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

80.1, 86+, 192+, 223.3, 236.1, 236.2, 244, 329+, and 639+, for another construction having a curvilinear feature.

503, for a barrier with an internal fluid passage formed by modules.

575, for a module having non-parallel joint faces e.g., keystone shaped block.

606+, for a hollow block which may be used to form a construction with a through passage.

#### SEE OR SEARCH CLASS:

138, Pipes and Tubular Conduits, appropriate subclasses, particularly subclasses 100+ and 157+, and see the reference to Class 138 in the class definition of this class (52).

This subclass is indented under subclass 245.

Device including a horizontal structure, e.g., floor or roof, mounted on and crossing at least the inner edge of the curved barrier.

247 This subclass is indented under subclass 245. Structure wherein the curvilinear barrier rests on a discrete base and wherein additional means are provided for securing the barrier to the base.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

274, for an intersection supported on a base.

292+, for a footing supporting a planar wall.

248 This subclass is indented under subclass 245. Structure including a strip or rod-like member which encircles the barrier construction.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

223.3, for a similar construction wherein the member has means radially compressing a tubular construction.

249 This subclass is indented under subclass 245. Structure in which the curvilinear barrier is formed of plural layers which are facially opposed.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

561+, for a barrier of laterally related, individually assembled courses and see the search notes under subclass 561 for other constructions involving plural layers.

#### SEE OR SEARCH CLASS:

- 138, Pipes and Tubular Conduits, subclass 114 for plural coaxial ducts and subclass 148 for tubular structures having plural spaced layers and see the reference to Class 138 in the class definition of this class (52).
- 250 This subclass is indented under the class definition. Structure including a reinforced construction having a cast component which forms (a) wall, ceiling, floor or roof, (b) a load bearing column or (c) a girder or beam at least two of a, b or c being arranged in connected relationship with their principal dimension intersecting.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 86+, for a vertically curved stone-like arch construction.
- 91.2, for inclined roof with supporting substructure and cast material at the eave.
- 128+, for a burial vault type construction.
- 174+, for a building construction with a traffic guiding feature.
- 192+, for a liquid or fluent material container with a fluid port.
- 198+, for an enclosure with fluid guiding port between the ambient and a usable space.
- 218, for a flue with a gaseous fluid directing feature.
- 219, for a flue with a connection to a building structure.
- 294+, for a concrete type footing structure.
- 319+, for a barrier construction having riblike portions projecting from the face of the barrier.
- 606+, for a module, per se, with a traversing passage.
- 251 This subclass is indented under subclass 250. Structure which is specialized to a reinforced construction having a vertical component supporting a horizontal component, e.g., monolithic intersection of a column and beam.
- 252 This subclass is indented under subclass 251. Structure in which the horizontal component is an elongated sustainer, e.g., a beam or a ribbed cast slab.

- 253 This subclass is indented under subclass 251. Structure including embedded plates or rings in the columns, which rings or plates are engaged or contacted by the reinforcement of the horizontal member.
- 254 This subclass is indented under subclass 250. Structure including a device extending beneath the exposed faces of a corner defined by intersecting faces of the construction, a portion of the device, usually the outside edge of an angle member, being exposed at the intersection of said faces.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 85, for a curved entrance arch having edge protectors.
- 179, for a stepped stair tread nosing.
- 371, for a screed for a planar settable material surface.

#### SEE OR SEARCH CLASS:

- 404, Road Structure, Process, or Apparatus, subclasses 4+ and 7+ for road curb structure.
- 255 This subclass is indented under subclass 254. Structure in which the member constitutes a reinforcing protector for a corner, created by the intersection of two generally planar facing layers of cast in situ material, e.g., plaster.
- 256 This subclass is indented under subclass 255. Structure in which the member has at least two separably connected portions, one forming an exposed corner edge and the other extending into or along the cast in situ facing layers.
- 257 This subclass is indented under subclass 255. Structure wherein the reinforcement has a plurality of discrete, separate anchor parts disposed at spaced intervals along its length.
- 258 This subclass is indented under subclass 250. Structure including a sustainer of cast in situ settable material which sustainer is surrounded by modules forming an intersection.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

259, and 260, for other intersection constructions with cast in situ material.

415+, for a barrier formed by a facer bonded by a cast section, e.g., brick wall.

This subclass is indented under subclass 250. Structure including cast in situ material at the juncture of intersecting modules.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

258, for a cast in situ sustainer concealed within an intersection formed by laterally related modules.

415+, for modules bonded to an internal cast in situ section forming a construction of more general application.

260 This subclass is indented under subclass 250. Structure including a cast in situ reinforced column provided with distinct reinforcing members, e.g., rods, extending transversely of and radiating therefrom into an intersecting cast in situ floor, roof or beam.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

82, for a cover construction with radial ribs.

251+, for a sustainer supporting a transverse structure with reinforcing at the juncture.

258, and 259, for related constructions and see notes

This subclass is indented under the class definition. Structure including two or more spaced structures, at least one being a wall, ceiling, floor or roof, which structures are angularly related, usually at 90°, the combined structure defining at least two intersections, e.g., columns supporting a roof, three or more intersecting columns, etc., and thus defining at least three sides of an area.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

241+, for a partition secured to a barrier by a base-board type member; appropriate subclass above for various enclosure constructions involving two or more intersections.

250+, and 272+, for other constructions forming a single intersection.

262 This subclass is indented under subclass 261. Structure in which one barrier is a ceiling or roof resting on the upper terminus of two or more spaced vertical load-bearing constructions, e.g., columns or walls.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

11+, for a roof with an eave or a valley gut-

73+, for a rigid barrier cantilevered from a vertical structure.

86+, for a vertically curved arch.

90.1+, for an inclined cover or rafter with supporting substructure.

94+, for a structure peculiar to a roof having a defined structure forming an exposed terminal edge.

263 This subclass is indented under subclass 262. Structure in which the vertical structures are columns.

This subclass is indented under subclass 261. Structure in which two or more walls rest upon and are supported by a floor.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

274, for a footing supporting intersecting walls

293.1+, for a footing supporting a wall.

265 This subclass is indented under subclass 264. Structure in which a barrier (floor or wall) construction is composed of two or more layers of material.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

249, 258, 267, and 275+, for a construction forming an intersection involving a barrier of plural layers of material.

506.01+, for a residual construction of dissimilar layers and see the references under "SEARCH CLASS" in subclass 506.01 for various constructions involving a layered structure.

266 This subclass is indented under subclass 261. Structure wherein at least one wall is formed by distinct wall sections which are arranged in vertically aligned end-to-end relationship.

267 Structure under 261 including wall construction having plural, distinct, coextensive layers or sections.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

265, for a construction wherein a floor supports a wall at least one of which is of a layered construction.

268 This subclass is indented under subclass 267. Structure including a coextensive layer of material differing in kind from the material on both sides thereof.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

408+, for another construction having a disparate lamina separating other components.

269 This subclass is indented under subclass 267. Structure including a liner or shell of preformed, sheet-form material and another layer of material differing in kind from that of the liner or shell.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

268, for a disparate material separating facer sections.

506.01+, for a construction formed of modules with an attached sheetlike facing, e.g., metal on brick courses.

- This subclass is indented under subclass 261.
  Structure in which at least one wall structure is composed of preformed modules.
- 271 This subclass is indented under subclass 270. Structure in which the modules are superimposed and keying means extend between adjacent surfaces of the modules.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

578+, for a module or panel with a discrete edgewise connecting feature, e.g., integral key or separate fastener.

This subclass is indented under the class definition. Structure including a barrier, i.e., wall, floor, ceiling or roof, which intersects another barrier or a beam or column and also an adjunct or component specialized to use in such a construction, e.g., a corner trim member or corner block.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

64+, 73+, 86+, 90.1+, 128+, 234+, 246, 250+, and 261+, for a construction which may include two or more intersections of barriers.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 604 for metallic stock material having intersecting corrugations.

273 This subclass is indented under subclass 272. Structure including a flexible sheetlike member, e.g., carpet or linoleum, usually in face-to-face contact with a wall and floor which member is shaped to conform to an intersection or is held at an edge portion by retaining means lying at the intersection corner.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

179, for a member which is shaped to conform to the nosing of a stair tread member and subclasses 182+, for other covered stepped constructions.

287.1+, for an intersection having a corner cove type channel or trim member.

506.01+, for a construction having facer attached to dissimilar substructure, particularly subclass 511, for a mounting means attached to an upholstered facing panel.

716.1+, for a residual in situ attached channel, or trim strip.

800.1+, for a panel with separate attached edging.

#### SEE OR SEARCH CLASS:

16, Miscellaneous Hardware, subclasses 4+ for a carpet fastener wherein a barrier or a component thereof is only nominally defined.

274 This subclass is indented under subclass 272. Structure in which the intersection rests upon a structure differing substantially in kind or size from the supported structure.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

264, for a structure wherein a floor supports plural walls.

292+, for a footing (foundation) of more general utility.

275 This subclass is indented under subclass 272. Structure wherein the construction defining an intersection has inner and outer barrier facing sections formed by separate modules which are placed in juxtaposed position, i.e., front to back across a wall.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

506.01+, for a residual construction of dissimilar layers and see the reference under "SEARCH CLASS" in subclass 506.01 for various constructions involving a layered construction.

276 This subclass is indented under subclass 275. Structure wherein the module defining one of the sections comprises a discrete, integral corner member, e.g.,, angle or L, which member overlaps the contiguous faces of the intersecting modules of the other section, the exposed surface of the discrete member and the exposed surfaces of the intersecting modules lying in offset planes.

SEE OR SEARCH THIS CLASS, SUBCLASS:

279, for outer L and abutting inner modules forming intersecting barriers having coplanar exposed surfaces.

277 This subclass is indented under subclass 276. Structure wherein the corner member is curved along a substantial portion between terminal longitudinal edges thereof.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

287.1+, for a corner type trim member, per se.

278 This subclass is indented under subclass 276. Structure wherein the corner member has means integral or attached to it which means extends below the inner face of the other section and is attached to a supporting substructure for the latter.

SEE OR SEARCH THIS CLASS, SUBCLASS:

209+, for a cap-like bridger strip over the juncture of coplanar panels.

279 This subclass is indented under subclass 275.

Structure having inner modules in abutting relationship or separation by a mere divider such as mortar and also an outer L-shaped module covering the juncture of the abutting modules.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

276+, for intersections where the sections of an integral angle overlap the abutting barrier sections.

280 This subclass is indented under subclass 272.

Structure including at least three elongated rigid shafts lying in three intersecting planes each containing two of the shafts at least one sheetlike member forming a barrier or facing attached to at least one of the members and being parallel to its plane.

281 This subclass is indented under subclass 272. Structure including an elongated sustainer, e.g., beam or column which is located at, and is longitudinally coextensive with the juncture of angularly related panels or modules.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

258, for an intersection formed by laterally related modules and having a concealed cast in situ sustainer.

#### 282.1 Exposed sustainer:

This subclass is indented under subclass 281. Intersection in which the juncture member is visible to an observer.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

287.1+, for a sheetlike trim member at an intersection.

764+, for coplanarily arranged sections having a framing member between and separating the section edges and having an interfitting configuration between the framing member and the section.

#### SEE OR SEARCH CLASS:

- 109, Safes, Bank Protection, or a Related Device, subclass 79 for vault corners.
- 217, Wooden Receptacles, subclass 65 for box corners.
- 403, Joints and Connections, subclass 205 for a corner connector for two members.

# 282.2 With three or more identical panel or module connection points:

This subclass is indented under subclass 282.1. Visible intersection in which the juncture member has at least three similar securing portions.

# 282.3 Wall, ceiling, or floor section designed to receive corner connector:

This subclass is indented under subclass 282.1. Visible intersection in which the juncture member fits into a designated location in a static structure component.

#### 282.4 With fastener:

This subclass is indented under subclass 282.1. Visible intersection in which the juncture member has a bolt, screw, rivet, or nail type securing member through the wall juncture pieces.

#### 282.5 Compressing a clamping means:

This subclass is indented under subclass 282.4. Fastening means in which the juncture member has a threaded bolt-type fastener which presses at least one discrete member against the juncture member.

283 This subclass is indented under subclass 272. Structure including a rigid vertical structure, e.g., column or wall, provided with a laterally extending feature which supports a barrier or preform extending generally horizontally of the vertical structure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 289, for a construction of coplanar sustainers (joists) intersecting a wall.
- 702, for a saddle-like cantilevered anchor which holds a joist transversely of a wall.
- 284 This subclass is indented under subclass 272. Structure including plural angularly related modules or a single module specialized by its

shape for use in forming an intersection, e.g., corner blocks.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 281, for corner sustainer coextensive with modules.
- 608+, for nonrectangular cross-section modules of more general application.

### 285.1 Finite (i.e., not coextensive), disparate material tie:

This subclass is indented under subclass 284. Intersection including a determinate juncture member composed of a different material than the sections of a wall, floor, ceiling, or roof being secured.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

712+, for a sheet and wire tie of more general application.

#### SEE OR SEARCH CLASS:

- 109, Safes, Bank Protection, or a Related Device, subclass 79 for vault corners.
- 217, Wooden Receptacles, subclass 65 for box corners.
- 403, Joints and Connections, appropriate subclasses for just a corner connector.

#### 285.2 Including threaded tie member:

This subclass is indented under subclass 285.1. Intersection in which the determinate juncture member has a bolt or screw-type fastener.

#### 285.3 Clip-type tie:

This subclass is indented under subclass 285.1. Intersection in which the juncture member resiliently grips the static structure components in position.

#### 285.4 Lockpin-type tie:

This subclass is indented under subclass 285.1. Intersection in which the juncture member has a generally short cylindrically or rectangularly shaped piece that fixes the static structure components in position.

286 This subclass is indented under subclass 284. Structure which the module has a key on a vertical surface and a key on a horizontal surface which lock vertically and horizontally, respectively with other modules.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

589.1+, for a module in the same course with keys on angularly related faces.

### 287.1 CONDUIT, TRIM, OR SHIELD MEMBER AT CORNER:

This subclass is indented under the class definition. Structure wherein a trim-type element; e.g., tile or baseboard, forms an exposed surface which is attached at a floor-wall, wall-wall, or wall-ceiling intersection and serves as a channel, conduit, or covering strip for protective or decorative purposes.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

179, for a stair or tread nosing.

254, for a partition with an interfitted trim plate at a base or ceiling board.

716.1+, for edging.

#### 288.1 With mechanical fastener:

This subclass is indented under subclass 287.1. Corner conduit, trim, or shield which is held in position by a nail, screw, bolt, nut, rivet, pin, etc.

289 This subclass is indented under subclass 272. Structure including two or more spaced sustainers, e.g., columns or joists, which extend normally to a construction with which they form an intersection.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

283, for a module supported on a laterally projecting part of an intersecting barrier construction.

702, for a joist hanger wherein no arrangement of spaced sustainers and an intersecting barrier is defined.

This subclass is indented under the class definition. Structure including facially spaced, parallel coextensive strips or flanges, with a rigid elongated shaft extending normally to the strips with an end portion only thereof between the strips, i.e., two back-to-back baseboards with the end of a stud therebetween.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 241+, for a compartment forming partition having baseboards.
- 481.1, for a barrier with facers spaced by an internal sustainer, e.g., wall boards on either side of a stud.
- 690+, for open-work with side-by-side shafts, e.g., truss.

This subclass is indented under the class definition. Structure having adjustable means which is attached to a principal structure and which acts in compression, torque, tension or flexure to (1) correct deflection, warp or sag of the principal structure or (2) acts to reinforce one member of the principal structure so as to equalize the unit stress on the load-bearing members of the said principal structure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 222, for a construction utilizing a tensioned or flexed facing.
- 223.1+, for means acting under tension to compressively stress a structure in which the means is incorporated.
- 640, for a curvilinear or peaked truss with means to vary its camber.
- This subclass is indented under the class definition. Structure forming a discrete stable base which in use is peculiar to the support of and differs substantially in size and shape from that of a superimposed structural body such as a wall, post or column which body or base is not merely a coplanar component of or section of a floor.
  - Note. See the search notes below for appropriate subclasses for various other constructions involving a dissimilar base and attached section.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 27+, for an in situ erected structure with a feature for supporting a disparate article
- 169.1+, for a structure wherein a combination with or feature related to the earth is defined.

- 247, for curvilinear barrier anchored to a base.
- 274, for barrier intersection construction with a foundation.
- 506.01+, for a construction wherein a facer is attached to a dissimilar in situ erected section.

#### SEE OR SEARCH CLASS:

- 248, Supports, appropriate subclasses for bases of more general application, particularly subclasses 678+ for machinery supports; subclasses 519+ for staff supporting bases; and subclasses 346+ for miscellaneous article supporting bases.
- 403, Joints and Connections, subclasses 230+ for a connection between a rod end and a transverse surface of general application.
- 405, Hydraulic and Earth Engineering, subclass 222 and 224+ for a marine foundation, or a method or apparatus for installing the same; and subclasses 229+ for subject matter relating to foundations not provided for elsewhere (e.g., piers, or piles).

#### **293.1** For a wall:

This subclass is indented under subclass 292. Footing or foundation in which the base member substantially supports a vertical barrier construction; i.e., a wall.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

274+, for a corner and a footing.

#### 293.2 Of block (e.g., masonry) type:

This subclass is indented under subclass 293.1. Wall footing or foundation composed of concrete, wood, metal, or clay generally rectangular cube-like building units.

# 293.3 With wall-securing means between wall bottom and footing (e.g., sill or sill plate):

This subclass is indented under subclass 293.1. Wall footing foundation wherein the base and vertical barrier are attached by a discreet connection which also spaces the barrier from the footing or foundation.

- 294 This subclass is indented under subclass 292. Structure in which the base is composed primarily of a stone-like cast material, e.g., concrete.
- 295 This subclass is indented under subclass 294. Structure in which there is a tie embedded in the base and projects upwardly and outwardly thereof, which tie connects the supported structure to the base.
- This subclass is indented under subclass 294.

  Structure supporting a vertical, rigid, pole, post, column or the like.
- 297 This subclass is indented under subclass 296. Structure in which the base surrounds, e.g., embeds, the lower portion of the elongated rigid member.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

298, or another socket type footing for a shaft.

298 This subclass is indented under subclass 292. Structure wherein either the stable base or the supported body includes a recess which receives the other in telescopic interfitted relation.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

291, for a footing which embeds a shaft.

704+, for a socket type anchor or tie, either, per se, or embedded in a wall or ceiling.

- 299 This subclass is indented under subclass 292. Structure including a plurality of separated bases supporting structure extending from and between said bases, e.g., tower with feet on separate footings.
- This subclass is indented under the class definition. Structure which is vertical, i.e., wall or column, and includes a distinct member mounted at its top and so shaped as to be the final upper terminal of the structure.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

57, for a roof finial or cresting.

- 102, for a border formed as an earth supported coping which may include a low wall with a cap.
- 103+, for a marker or monument which may include a cap.
- 179, for a nosing of a step tread member.
- 218, for a flue which may include a cap therefor.
- 244, for a wall enclosing a space with a terminus edge protector.
- 254+, for a corner with a revealed embedded protector.
- 283, for an intersection wherein means at a joint may be a cap.
- 301 This subclass is indented under subclass 300. Structure in which the vertical structure is a rigid member having a limited closed periphery and which is greatly elongated relative to any lateral dimension.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

146+, for a vertical structure with a diagonal brace or guy engaging a base or the earth.

#### SEE OR SEARCH CLASS:

- 5, Beds, subclass 281 for a bed post top or ornament.
- 116, Signals and Indicators, subclass 173, for a flagstaff having a feature specialized to such use.

# 302.1 WALL, CEILING, FLOOR, OR ROOF DESIGNED FOR VENTILATION OR DRAINAGE:

This subclass is indented under the class definition. Structure in which a static structure, or a component, is specifically fabricated or modified to convey a fluid (e.g., a wall with a passage for air or water).

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 12+, for a cover with external water receiver at eave or valley; e.g., gutter.
- 95, for a roof with gable or eave structure and conduit or passage means for a subjacent area.
- 131+, for a grave vault with fluid ports.
- 169.5, for a drain or vent exterior to the building foundation perimeter.

- 198+, for an enclosure with a port from the ambient to an enclosed usable space.
- 209, for a door or window opening and a drain or vent for the reveal area.
- 220.1+, for a service duct within a barrier.
- 310, for a construction with a feature for removing excess moisture from cast material.
- 311.3, for grill-work in which there is a defined color, thickness variation, dissimilar characteristics, or irregular periphery of components.
- 503+, for a construction of plural modules forming a through fluid passage.
- 508, for dissimilar abutted facer sections which together form unoccupied spaces within barrier.
- 514.5, for a construction with means for injecting or connecting with grouting means.
- 533+, for lapped multiplanar surfacing having a joint with fluid handling feature.
- 553, for a similar surfacing with space or space forming feature.
- 606+, for an individual unit with a traversing passage.
- 633+, for openwork; i.e., a surface forming structure which exhibits open uniform through passages or openings extending from one face to another; e.g., trusses, grilles, particularly subclass 663 for a barrier having through passages extending from one side to another formed by stacked discrete components.

- 126, Stoves and Furnaces, subclass 633 for a wall or floor constructed with a passage for solar heated fluid to warm a building.
- 138, Pipes and Tubular Conduits, subclasses 156+ for a duct.
- 405, Hydraulic and Earth Engineering, subclasses 36+ for drainage devices.
- 454, Ventilation, subclasses 254+ for a specific inlet, outlet, or flow controlling device (damper, louver, etc.) to circulate and exchange air from one area to another.

#### 302.2 For a grain bin:

This subclass is indented under subclass 302.1. Floor in which the static structure is designed to allow air to circulate around a harvested crop.

# 302.3 With the vent or drain entirely along at least one substantial dimension (e.g., length, not thickness):

This subclass is indented under subclass 302.1. Wall, ceiling, floor, or roof comprising a distinct cavity, space, chamber, channel, groove, or other three dimensional hollow-type area through which a liquid or gas flows to be discharged.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

263, for a three-way corner construction on a column (e.g., elevated floor).

#### SEE OR SEARCH CLASS:

- 165, Heat Exchange, subclasses 47+ for a structural installation.
- 454, Ventilation, subclasses 254+ for devices allowing the flow of air in a building.

#### 302.4 Composed of interfitting blocks:

This subclass is indented under subclass 302.3. Hollowed wall, ceiling, floor, or roof wherein the hollow-type area is constructed from a hand-carried rectangular building unit attached to similar building units to form an; e.g., wall.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 415+, for modules bonded by internal settable material.
- 503+, for hollow modules that form through passages in a barrier interior.
- 592.6, for modular panel or block with integral key designed for stacking.
- 606+, for an opaque stonelike module with a passage.

#### 302.5 For a pole or post:

This subclass is indented under subclass 302.1. Structure in which a self-supporting vertical-type structure is fabricated to allow the flow of a gas or liquid.

#### 302.6 Embedded flashing:

This subclass is indented under subclass 302.1. Wall in which a preformed, imperforate member acting as a separator between contacting elements is so formed as to allow a fluid to flow along it; e.g., a sheet metal piece inside of a wall which deflects liquid.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

58+, for exterior-type flashing.

408+, for a similar construction without a liquid flow feature.

#### 302.7 Including a plug for drain or vent:

This subclass is indented under subclass 302.1. Wall, ceiling, floor, or roof in which a distinct device closes the fluid conveying means.

This subclass is indented under the class definition. Structure including a material that permits the passage of light and which material is embedded in but visible at a face of the embedding material or is a facing for or forms a glass block, i.e., a unit which has inherent stability against overturning as opposed to a glass pane.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 80.1+, for a compound curve cover, e.g., dome roof or skylight.
- 104, for a marker or monument including a translucent feature.
- 133, for a burial vault with a viewing feature.
- 171.1+, 203, 204+, 204.591+, 304, and 624+, for various constructions wherein a panel is often a glass pane.

- 359, Optics: Systems (Including Communication) and Elements, subclasses 591+ for elements to illuminate the interior of buildings with outside light.
- 428, Stock Material or Miscellaneous Articles, subclass 67 for an article having an element embedded therein and which is visible.
- 307 This subclass is indented under subclass 306. Structure wherein the construction including a visible translucent component also includes an

element which is made of a material different from that of the translucent component and is preformed before assembly with the translucent component.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

782+, for a composite panel with sheets in face-to-face contact.

308 This subclass is indented under subclass 307. Structure wherein the preshaped component of different material is placed at an edge of a translucent component, i.e., between the sides of components and extends normal to the face of the resultant barrier, usually to frame a glass block.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 475.1, for construction involving modules in openings of a lattice frame.
- 601, for a stone-like module with dissimilar material edging.
- 782+, for a parallel-pane panel having a disparate edging which usually holds the plural panes in their parallel positions.
- 782+, for a composite panel with a disparate edging.
- 309.1 This subclass is indented under the class definition. Structure, including (1) a significant building structure having bonded thereto or embedded therein a synthetic resinous component, or (2) a defined synthetic resin building component having a physical configuration peculiar to use as a structural component.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 208, for panels closing an opening and having means for attaching to a barrier, which panel is often defined as a "safety glass" sandwich having as its core layer a resinous plastic sheet.
- 384+, and 390+, for a plastic veneer tile not limited to a specific synthetic resinous compound or composition.
- 612, and 782+, for a construction unit with layered components, and see the references under "SEARCH THIS CLASS, SUBCLASS" and "SEARCH CLASS" in those sub-

classes for other locales of this type of structure.

#### SEE OR SEARCH CLASS:

- 520, Synthetic Resins or Natural Rubbers, for synthetic resin compounds and compositions there provided for which are not limited by a particular physical configuration to a structural use.
- **309.11** Structure under 309.9 wherein the exterior, nonporous components are tied together by an element distinct from the porous, foam-like component therebetween.
- **309.12** This subclass is indented under subclass 309.8. Structure wherein the nonfoam-like component is a hydraulic, cementitious material, e.g., concrete.
- **309.13** This subclass is indented under subclass 309.1. Structure wherein the synthetic resinous component has a nonresinous component bonded thereto or embedded therein, and is coextensive therewith in at least one dimension.
- 309.14 This subclass is indented under subclass 309.13. Structure wherein the nonresinous components are the outermost or exterior faces.

- 428, Stock Material or Miscellaneous Articles, appropriate subclasses for laminations in general.
- 309.15 This subclass is indented under subclass 309.13. Structure wherein the nonresinous component is the core or center component, being sandwiched between or surrounded by the resinous component.
  - (1) Note. The exterior nonresinous component (s) may be openwork in structure.
- 309.16 This subclass is indented under subclass 309.13. Structure wherein the synthetic resinous component has embedded therein an elongated nonresinous component.
- **309.17** This subclass is indented under subclass 309.13. Structure wherein the nonresinous component is a hydraulic cementitious material, e.g., concrete.

309.2 This subclass is indented under subclass 309.1. Structure wherein a specific, limited area of the resinous component is reinforced to aid in receiving a fastening means.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

782+, for an internal receiver for an elongated fastener.

- 309.3 This subclass is indented under subclass 309.1. Structure wherein the synthetic resinous component is not a foam, and functions to bond two surfaces together.
- 309.4 This subclass is indented under subclass 309.1. Structure wherein the synthetic resinous component is made of porous foam-like material.

#### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, appropriate subclasses for laminations containing foam; subclasses 69+, for a foam or cellular material, the cells being filled with a gas other than air.
- 309.5 This subclass is indented under subclass 309.4. Structure wherein the foam-like porous component is an adhesive.
- 309.6 This subclass is indented under subclass 309.4. Structure wherein the cells or voids make up the porous, foam-like material are not closed spheres, but are open and interconnect with one another.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 322.7, for stock material of open cell foam.

309.7 This subclass is indented under subclass 309.4. Structure wherein the porous, foam-like component has embedded therein an elongated component, such elongated component being completely surrounded, at least along its longitudinal dimension by the porous, foam-like component.

309.8 This subclass is indented under subclass 309.4. Structure wherein the porous, foam-like component is directly adjacent to at least one nonfoam-like component.

309.9 This subclass is indented under subclass 309.8. Structure wherein the exterior or outermost components are of nonfoam-like material.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

782+, for sandwich type panels.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclasses 312.8+, for a cellular or porous component including a nonporous or noncellular layer.

This subclass is indented under the class definition. Structure including an element or feature of a particular composition or porosity which is specialized to absorbing or draining excess moisture from a mass of an initially fluid but settable material.

SEE OR SEARCH THIS CLASS, SUBCLASS:

302.1+, for constructions with an exteriorly opening fluid part and see notes.

### 311.1 ORNAMENTAL: COLOR, THICKNESS VARIATION, OR DISSIMILAR ELE-MENTS FORMING PATTERN:

This subclass is indented under the class definition. Structure including means forming an exposed face which exhibits a particular desired visual effect, which effect is gained by: (1) having a defined coloring, (2) relief or intaglio surface shape of a monolith or component element, or (3) by a defined pattern formed as the result of the edge-to-edge relationship of elements which have differing surface characteristics or an irregular periphery.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

57, for a roof with finial or cresting.

103+, for a marker or monument.

105. for a structure with indicia.

384+, and 390+, for a veneer tile construction which may form a regular pattern.

- 554+, for a lapped covering of generally similar sections; e.g., shingles, which together form a pattern.
- 557+, for lapped multiplanar generally similar elements forming a surfacing which simulates a single element.

#### SEE OR SEARCH CLASS:

- 404, Road Structure, Process, or Apparatus, subclass 42 for modules with a patterned face.
- 428, Stock Material or Miscellaneous Articles, subclasses 3+ and 542.2+ for a miscellaneous ornamental article not provided for elsewhere and subclass 598 for a metallic stock material having a T- or X-shaped cross-section.

#### 311.2 Elements interfit or abut to create design:

This subclass is indented under subclass 311.1. Ornamental structure wherein a static structure component (e.g., wall, ceiling, floor, door) is composed of distinct pieces that, when assembled, make a unique pattern or configuration.

#### 311.3 Decorative feature on a grille-type support:

This subclass is indented under subclass 311.1. Ornamental structure wherein an assembly of structural members form an array or grid-type pattern for a wall, or ceiling.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

204.61, for window decorative grilles.

312 This subclass is indented under subclass 311. Structure wherein a portion of the construction comprises a member with a slot or groove into which an elongated strip fits.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

716.1+, for a residual in situ attached trim strip.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclasses 156+ for a stock material product in the form of a single or plural layer web or sheet in which at least one component varies in thickness.

313 This subclass is indented under subclass 311. Structure wherein the desired visual effect is achieved by the arrangement of separate sections made of wood, there being a visible difference in the grain of at least two sections.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

316, for integral relief which may utilize or simulate wood grain.

#### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclasses 44 through 62 for plural stock material sheets or webs abutting edge to edge, whether or not joined, and subclass 106 for a plural component web or sheet comprising wood grain in two layers or components angularly related.
- 314 This subclass is indented under subclass 311. Structure in which the exposed face of a preformed unit gives the appearance of being formed of multiple units, this effect being gained by deformation or marking of the base material of at least one facing section.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 316, for other integral relief ornamental facings.
- 557+, for a similar construction involving a multiplanar overlapping sectional surface, e.g., shingles forming a pattern.

- 428, Stock Material or Miscellaneous Articles, subclasses 156+ and 174+ for nonuniform thickness or nonplanar uniform thickness stock material which may simulate multiple units and subclass 573 for a metallic stock material having a width or thickness variation which repeats longitudinally.
- 315 This subclass is indented under subclass 311. Structure which discrete elements, e.g., natural stone, are partially embedded in a structural unit, the portions not embedded being exposed to provide the desired effect.

for a cast type surfacing with revealed intersecting stiffness.

384+, and 390+, for a veneer tile construction which forms a regular pattern.

316 This subclass is indented under subclass 311.

Structure in which the desired effect is obtained through a relief or intaglio surface deformation of a face of the material of a panel like member.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

314, for a facer deformed to simulate plural facer units.

#### SEE OR SEARCH CLASS:

- 156, Adhesive Bonding and Miscellaneous Chemical Manufacture, subclass 59 for a process of etching involving formation of relief or intaglio surfaces.
- 428, Stock Material or Miscellaneous Articles, subclasses 156+ for a structurally defined stock material product in the form of a single or plural layer web or sheet in which at least one component varies in thickness and subclass 598 for a metallic stock material having aT or X shaped cross section.
- This subclass is indented under the class definition. Structure wherein a wall cavity is broken up into a plurality of dead air spaces by elongated transverse elements the ends of which engage adjacent vertical framing members (studs) and the sides of which engage the opposed inner surfaces of the wall surfacing.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

404.1+, for insulation inserted in barrier cavity.

This subclass is indented under the class definition. Structure including a cast in situ barrier with intersecting or crossing reinforcing stiffeners embedded therein, with the common edges of said members being exposed at a surface of the barrier, usually to reduce wear on the barrier material, e.g., terrazzo paving.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 181, for a wear surface with an embedded or inserted filler.
- 315, for an ornamental cast panel with revealed embedded components.
- 455+, for a sectional imperforate facing within a peripheral frame, e.g., a multipaneled door or window sash.
- 475.1+, for a preformed panel within a preassembled frame.

#### SEE OR SEARCH CLASS:

- 14, Bridges, subclass 73 for a similar construction peculiar to bridge floors.
- 404, Road Structure, Process, or Apparatus, subclasses 47+ for a pavement including joint means, subclass 67 for terrazzo-like components and subclass 70 for a pavement including reinforced structure.
- This subclass is indented under the class definition. Structure including a cast in situ primary concrete body, which forms a major face of a barrier (wall or floor) combined with an elongated sustainer for the concrete body having at least one terminal longitudinal edge projecting laterally outward of said major face, the structure as a whole being such as to resist relatively heavy transverse loads, e.g., a concrete, ribbed, reinforced floor.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 344+, for a construction for walls or partitions wherein a settable material (plaster) backer is fixed to a furring, stud or joist.
- 483.1+, for a construction wherein a preformed facer element is wholly positioned to one side of a sustainer.
- 602, for a cast reinforced module with monolithic ribs.

#### SEE OR SEARCH CLASS:

405, Hydraulic and Earth Engineering, subclasses 233+ for a method or apparatus for installing a cast in situ pile; and subclass 257 for a cast in situ pile, per se.

320 This subclass is indented under subclass 319. Structure including a rigid self-sustaining filler member between spaced sustainers, which member has a depth which is substantial relative to its length and height, the member being used in side-by-side relationship with others, one coplanar face formed by the members being covered by the cast in situ barrier material, e.g., a ribbed concrete floor with hollow tile fillers.

321 This subclass is indented under subclass 320. Structure including a reinforcing member extending between and transversely of the sustainers, which member engages the sustainers and retains them in position.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

239+, 326, 335+, and 338+, for a sheetlike backer between sustainers.

475.1+, for a facer within a cornered peripheral frame.

322 This subclass is indented under subclass 320. Structure in which the sustainer consists of reinforced settable material, which sustainer is preformed before it is placed, it is joined to the settable material.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

721.1+, for a stone-like sustainer, per se, with feature for resisting transverse loading.

323 This subclass is indented under subclass 320. Structure including fillers which are subdivided into two or more sections, which sections cooperate with each other to form a complete filler unit, which unit forms a void within the cast in situ material.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

380+, for cast in situ barrier construction defining an isolated space and lacking a laterally projecting rib-type sustainer

576, for a module with an isolated internal cavity.

577, for embedded type void former, per se.

324 This subclass is indented under subclass 320. Structure including distinct means underlying the face of a sustainer section which fills the space between the filler members.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

440+, for a construction of facer sections bonded together by settable material sections which are covered by a surfacing section or other means.

325 This subclass is indented under subclass 320. Structure in which the filler member circumscribes a cavity and has an external shape which in silhouette is other than a rectangle.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

608+, for a nonrectangular cross-section block, per se, which may be used in a cast ribbed-type construction.

326 This subclass is indented under subclass 319. Structure including (1) sheetlike members against which the concrete is cast or (2) elongated members extending transversely of the sustainers which act to strengthen the barrier construction combined with means engaging members (1) or (2) and acting to suspend them from the sustainer.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

321, for a similar construction of blocktype fillers with a transverse retainer engaging a sustainer.

506.06+, for a facer suspended from a sustainer lacking the settable material component, e.g., a so-called "suspended ceiling".

327 This subclass is indented under subclass 319. Structure including a separately identifiable additional facing section which is carried by the cast barrier section either directly or by the rib-type sustainer, which section is coextensive with an extended surface of the construction forming the primary load-bearing barrier.

334

SEE OR SEARCH THIS CLASS, SUBCLASS:

367, for nailing strips embedded in and supported by a stone-like base structure.

479+, for another type of barrier with faceto-face sections.

506.01+, for a barrier formed by modules and attached dissimilar section.

- 328 This subclass is indented under subclass 327. Structure in which the additional facing section rests on or is fixed to the surface of the barrier on the side thereof opposite to the side from which the sustainer projects, e.g., flooring above a ribbed concrete subfloor.
- 329 This subclass is indented under subclass 327. Structure including a generally sheet-form curvilinear member which is supported by the ribtype sustainer and against the convex side of which the concrete forming the barrier surface is poured, i.e., the sustainer and arched backer constitute a form.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

86+, for structure which as a whole forms a vertical curvilinear arch.

339, for a similar construction involving only a cast barrier.

- 330 This subclass is indented under subclass 329. Structure in which the rib-type sustainer includes an elongated flange-web type (I or T beam) reinforcement embedded therein.
- 331 This subclass is indented under subclass 327. Structure including distinct means, e.g., hanger, bracket or spacer, interposed between the additional section and the terminal face of the sustainer which is adjacent thereto.
- 332 This subclass is indented under subclass 327. Structure in which the additional section is formed by thin rigid units arranged in edge-to-edge relationship.
- 333 This subclass is indented under subclass 327. Structure in which the additional section is formed of settable material and the extremity of the sustainer opposite the barrier is anchored or embedded in the material of the section.

This subclass is indented under subclass 319. Structure including means, usually a projection, fixed to the sustainer, usually a metal beam which means anchored or embedded within the cast barrier material and acts to reduce or eliminate longitudinal movement or slippage, i.e., shear, between the sustainer and the barrier forming material.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

647, 740.7, 740.6, 740.3+, and 740.9, for a shaft with a lateral projection.

335 This subclass is indented under subclass 319. Structure including a preformed sheetlike member carried on the upper surface of the sustainer and spanning the space between plural sustainers, which member supports the cast barrier-forming material.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

344+, particularly subclass 354 for a settable material (plaster) backer fixed to a furring, joist or stud.

336 This subclass is indented under subclass 335. Structure in which the sheetlike member is corrugated, with the axis of the corrugations extending normal to the sustainer axis.

- 416+, for lapped multiplanar or bridge strip type surfacing in which sheets are held by settable material.
- 450+, for a corrugated imperforate sheet member which acts as a backer for settable material.
- 630, for a panel with integral reinforcing, e.g., a corrugated panel.
- 337 This subclass is indented under subclass 319. Structure in which parallel sustainers of settable material are intersected by, and are integral with, parallel sustainers disposed normally to the first mentioned sustainers, and together form a grid or lattice, often termed a "waffle ceiling" in the art.

342

SEE OR SEARCH THIS CLASS, SUBCLASS:

252, for cast reinforced column with distinct sustainers therebetween.

475.1+, for a preshaped unit in a preassembled cornered peripheral frame.

338 This subclass is indented under subclass 319. Structure in which the sustainer is of the flange-web (I or T beam) type and a section forming a backing for the cast material is supported from a surface of a flange forming an inside corner with the web.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

469, for a structure wherein a sustainer section, e.g., flange extends into a notch or rabbet in a module.

506.01+, for a related construction wherein a facer is attached to a dissimilar barrier section.

339 This subclass is indented under subclass 338. Structure in which the backer section is generally curvilinear and sheetlike and wherein the barrier material is supported from the convex side of the curved backer section.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

329+, for a similar structure with an additional facing section.

340 This subclass is indented under subclass 319. Structure in which the material of the barrier or similar material completely encloses a member which acts as a laterally projecting sustainer.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

721.1+, for a reinforced stone-like beam or girder, per se, having a defined structural feature resisting transverse loading.

738.1, for a beam or girder with a dissimilar shell.

341 This subclass is indented under subclass 340. Structure in which the primary barrier includes embedded reinforcing means, e.g., rods, which reinforcing is modified or altered where it crosses the sustainer.

This subclass is indented under the class definition. Structure in which a plurality of thin, flat slat-like members whose width is greater than their depth and whose length is greater than either, the members being arranged with a flat major face in planar, side-by-side spaced relationship, the structure as a whole receiving a settable material which extends between the members and also covers the major faces, e.g., wood-lath plaster wall.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

367+, for a flat ground member serving as a screed or fastener receiver, i.e., with a revealed surface at the settable material face.

454, for a panel with attached filament or mesh for retaining settable material.

660+, for a fabric or lattice sheetlike open work, e.g., mesh.

343 This subclass is indented under subclass 342. Structure wherein the members are (1) connected by means of a filament or (2) intersect and pass over and under each other.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

669, for a foraminous fabric or lattice openwork formed by discrete rod-like members which are dissimilar in cross-section.

676, for a fabric or lattice openwork formed as a mesh with attached bodies.

This subclass is indented under the class definition. Structure including panel means (backer) attached to an elongated rigid member serving as a spacer or sustainer and known to the art as a furring, joist or stud, the panel means or arrangement thereof being specialized to the reception or retention of a settable material which sets to rigidity, e.g., plaster covered panel, panel with plaster retaining features, combination of panels wherein the fasteners therefor act to retain plaster, etc.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

238.1+, for a vertical partition secured to a preconstructed transverse barrier.

- 342+, for openly spaced slat type lath.
- 364, for an installed screed or unit with a feature retaining a penetrating fastener.
- 443+, for an imperforate type settable material receiving backer, per se.
- 474+, for a construction of more general application wherein modules are fixed to an elongated sustainer, particularly subclasses 483.1+ for a module held laterally of sustainer.
- 660+, for a fabric or lattice openwork which in use may be embedded.
- 345 This subclass is indented under subclass 344. Structure including adjustable means spacing the backer from the elongated rigid member.

365, for an adjusting means for a screed or penetrating fastener receiver.

346 This subclass is indented under subclass 344. Structure including means allowing the backer to float or to move relative to the elongated rigid member.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 345, for a similar combination with an adjustable spacer.
- 573.1, for a structure of more general application having means accommodating a dimension variation responsive to changing conditions, e.g., expansion by heat.
- 347 This subclass is indented under subclass 344. Structure including means on the support side of the backer for inhibiting or moderating the passage of vibrations, moisture or temperature variations through the assemblage, e.g., sound or heat insulating.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 17, for an insulated car roof.
- 144+, for structure including an element having physical features for acoustical purposes.
- 167.1+, for means compensating earth transmitted force.

- 380+, for a cast in situ barrier with a filler within it.
- 404.1+, for a nonsettable insulating material within a cavity in a barrier.
- 408+, for a disparate sheet lamina separating components of an in situ construction.
- 348 This subclass is indented under subclass 344. Structure having at least two spaced elongated rigid members arranged in an intersecting or crossing relationship to two other such spaced members thus defining a supporting framework for a backer parallel thereto.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

762+, for a facer lateral of a pre-positioned polygonal frame.

349 This subclass is indented under subclass 348. Structure in which the backer frame includes an elongated rigid member, i.e., stud or joist, which terminates at the flange of a flanged member.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

241+, for a partition having an elongated terminal member joined to a preconstructed barrier.

This subclass is indented under subclass 348. Structure in which one member is supported by the flange of a crossing or intersecting member.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

349, for a like structure where an elongated rigid member terminates at the flange of a flanged member.

351 This subclass is indented under subclass 344. Structure including a load-bearing barrier section and means permanently embedded in said section, which means is connected to elongated rigid member which supports the backer and/or to the backer itself.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

698+, for an anchor or tie, per se, specialized to use in an in situ construction and see the search notes thereunder for other constructions utilizing a tie.

- 352 This subclass is indented under subclass 344. Structure comprising a pair of spaced parallel sheets, at least one of which is a backer for retaining settable material, and a longitudinal projection integral with at least one sheet, which projection retains the sheets in parallel, spaced relation.
- 353 This subclass is indented under subclass 344. Structure in which a distinct tie member crosses or extends through opposed backers.

698+, for an anchor or tie, per se, and see the search notes thereunder for other constructions utilizing a tie.

354 This subclass is indented under subclass 344. Structure in which an integral part of the elongated rigid support usually a rib, extends between opposed edges of coplanar backers.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

338+, for a barrier with a cast in situ section and a lateral rib wherein a backer is supported by an interposed flangeweb sustainer.

468, for a cap-like bridger strip extending between edges of panels.

- 355 This subclass is indented under subclass 354. Structure including a discrete separable fastener cooperating with the part of the support between the backers and acting to retain a backer in position.
- 356 This subclass is indented under subclass 344. Structure in which the elongated rigid member is structurally modified to engage and retain a backer or an intermediate holder for such backer.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

482, for a shaft having a ductile type deformable grip for a facer.

357 This subclass is indented under subclass 344. Structure including a separate clip-type fastener, one end of which engages the distal surface of the backer relative to the elongated

support member and the other end of which engages a distal surface of the member disposed relative to the backer.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

712+, for a sheet and wire tie, per se, which is used to connect components of an in situ construction.

#### SEE OR SEARCH CLASS:

24, Buckles, Buttons, Clasps, etc., appropriate subclasses, particularly subclass 339 for fastener not specialized to building construction.

358 This subclass is indented under subclass 357. Structure in which the clip-type fastener is formed by a wire, a length of which extends completely across a face of a backer section.

359 This subclass is indented under subclass 357. Structure in which the member is a flange-web (I or T) member, the backer or its support abutting or being fixed to the flange, which flange is also engaged by the clip.

360 This subclass is indented under subclass 359. Structure in which there are flanges extending from opposite sides of the web and the clip includes means engaging the distal edges of the oppositely projecting flanges.

361 This subclass is indented under subclass 344. Structure including a fastener which passes into or through either the backer, the member or both.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

364+, for another construction having a defined feature for receiving a penetrating fastener.

#### SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 439+ for impact driven fasteners of general application, and see the reference to Class 411 in Class 52, subclass 698.

- 362 This subclass is indented under subclass 361. Structure in which the fastener penetrates or passes into the material of the member.
- 363 This subclass is indented under subclass 362. Structure in which the fastener also passes into the material of the backer.
- This subclass is indented under the class definition. Structure including a component having a defined structural modification (1) specialized to the purpose of retaining that type of fastener which forces retaining surfaces apart or makes its own hole or (2) acts as or retains a screed, i.e., a guide for a stricker which levels unset material such as plaster or concrete other than a mere preferred smooth or threaded hole.

361+, for a settable material backer (plaster board) attached to a furring, joist or stud by a penetrating fastener.

#### SEE OR SEARCH CLASS:

- 33, Geometrical Instruments, subclasses 404 through 410 for a straight edge wall guide or plumb tool, not specialized to a structural installation in an in situ building construction.
- 365 This subclass is indented under subclass 364. Structure including a feature for shifting the screed or fastener receiver relative to the base structure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

345, for a backer fixed to furring, joist or stud by an adjustable spacer.

366 This subclass is indented under subclass 364. Structure in which the screed or fastener receiver is attached to the base structure by a settable adhesive.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 390, for an adhesively secured veneer facing tile.
- 416, for a lapped surfacing or bridge strip held by a settable material section, e.g., adhesive strip.

367 This subclass is indented under subclass 364. Structure in which the screed or means receiving a penetrating type fastener is embedded or formed within a stone-like material base, e.g., concrete.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 27+, for a screed with a support for a disparate article.
- 213+, for a closure or window frame member which may act as a screed.
- 254+, for a corner protector which may act as a screed.
- 318, for a monolithic barrier with revealed intersecting stiffeners.
- 344+, for a settable material backer fixed to a furring, joist or stud.
- 480, for a structure having modules fixed to an elongated sustainer and a sleeper for an additional section.
- 698+, for another anchor or the tie, per se, specialized to use in retaining components of a building construction.
- 368 This subclass is indented under subclass 367. Structure including an elongated rigid load sustaining member formed by particularly related discrete components of materials which differ in kind, the material of one component being specialized to receiving a fastener that is driven into and held by that component.

- 361+, for settable material backer which is fixed to a furring, joist or stud by a penetrating type fastener.
- 376, for another composite structure wherein one component is a non-metal and receives a penetrating fastener.
- 720.1+, for other shaft-structures, particularly subclasses 724, 725, and 727+, for a shaft having a dissimilar material shell or facing.
- 369 This subclass is indented under subclass 367. Structure including a holding member having an integral portion for penetrating the screed or fastener receiver.

361+, for a penetrating type fastener holding a settable material backer (plaster-board) to furring, joist or stud.

370 This subclass is indented under subclass 367. Structure including a holder member having opposed legs for retaining therebetween the screed or fastener receiver.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

715, for a structurally similar tie.

- 371 This subclass is indented under subclass 367. Structure in which the embedded means is a thin-flat member, an edge of which is a guide for a leveling striker.
- 372 This subclass is indented under subclass 367. Structure wherein the fastener receiver is an insert having a particular external configuration, or distinct means connected thereto, cooperating with the base structure in such a manner as to prevent separation therefrom.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

480, for a structure including modules fixed to a sustainer and an additional section fixed to a sleeper.

698, search notes, for a reference to the class of Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fasteners

762+, for an interfitted shaft and facer.

#### SEE OR SEARCH CLASS:

- 411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 15+ for an anchor or holding device into which a fastener is forced, and see the Search This Class, Subclass references above for a reference to Class 411 in this class (52).
- 373 This subclass is indented under subclass 372. Structure including a hollow member which has an internal configuration or means, acting to retain the fastener.

- 374 This subclass is indented under subclass 373. Structure including a material which fills at least a section of the internal cavity of the hollow member and into which material the fastener is driven.
- 375 This subclass is indented under subclass 372. Structure in which the supporting substructure is a module or panel which is preformed before use at the job site.
- 376 This subclass is indented under subclass 364. Structure wherein the driven fastener retaining means is in the nature of a filler such as a wooden strip or plug held by the unit and formed of a material differing in kind from the basic material of the unit, usually metal.

#### SEE OR SEARCH THIS CLASS, SUB-CLASS:

368, for a composite shaft wherein the pierceable component is embedded in a stone-like base.

- 377 This subclass is indented under subclass 364. Structure wherein the penetrating fastener retaining means is shaped to deflect and bend the fastener as it is driven in place.
- This subclass is indented under the class definition. Structure including (1) a monolithic load-bearing cast in situ section, (2) a second section which is distinct from and coextensive with (1), and (3) a separate dissimilar member rigidly connecting (1) and (2), the resultant composite structure being such that parts (1), (2) and (3) must be assembled to each other on the site.

- 327+, for a cast in situ concrete barrier with a projecting rib and additional coextensive section.
- 383, for a structure with a cast barrier sections spaced by a tie and defining an isolated space.
- 506.01+, for a residual construction wherein a facer is attached to a dissimilar section and see notes.

#### SEE OR SEARCH CLASS:

- 405, Hydraulic and Earth Engineering, subclasses 233+ for a method or apparatus for installing a cast in situ pile; and subclass 257 for a cast in situ pile, per se.
- 379 This subclass is indented under subclass 378. Structure in which the second section is composed of preformed block-like units, a portion of the dissimilar member being located between opposed faces of the units, i.e., concrete supporting wall tied to brick veneer.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

698+, for a tie, per se, and see search notes for other constructions utilizing a tie.

This subclass is indented under the class definition. Structure comprising a barrier formed by a material cast at the site in a monolithic mass or separate sections, the barrier including cells or cavities which do not open through the major boundary faces of the barrier.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 353, for a plastered type hollow wall with the between backers.
- 378+, for a load-bearing cast in situ monolith, e.g., concrete wall, with coextensive section and tie in which the monolith and section may be laterally spaced.
- 404.1+, for another construction having an insulating insert in a cavity in a preconstructed barrier.
- 577, for embedded void former, per se.
- 381 This subclass is indented under subclass 380. Structure in which the cells or cavities are formed by a discrete liner formed by a wall structure closing on itself, the material of the barrier being cast around and in contact with the wall structure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

323, for a cast, ribbed type cast material barrier with a filler formed of cooperating void forming sections.

- 382 This subclass is indented under subclass 381. Structure in which the liner is curvilinear at least along a substantial section thereof, e.g., ball or cylinder.
- 383 This subclass is indented under subclass 380. Structure in which the barrier comprises a pair of continuously spaced substantially parallel coextensive sections or slabs with tie means, of a material other than that of the barrier material, extending between the spaced sections and retaining them in their spaced relation.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 378+, for a barrier, one section of which is a cast in situ load-bearing monolith to which a tie and an additional coextensive section are assembled.
- 562+, for laterally related individually assembled courses utilizing a dissimilar material tie.
- 698+, for an anchor or tie, per se, and see search notes for other constructions utilizing a tie.
- This subclass is indented under the class definition. Structure including thin, sheetlike, non-load-bearing facing elements which have their hidden faces attached closely adjacent to or in contact with the opposed surface of a preconstructed barrier by means comprising preformed components which together form a sheetlike retainer means (backer) for the elements, e.g., a grid with tiles in its openings.
  - (1) Note. See "Glossary" in class definition of "load-bearing".

- 127.1+, for a tile attached to a handling sheet or strip which is removed before the tiles are applied at site of use.
- 311.1+, for a construction wherein a desired effect is obtained by color, thickness variation or dissimilar elements forming a pattern.
- 390+, for a facing of tiles held by an adhesive (mastic) and tiles, per se, having structural features for such use.

- 415+, for facers, e.g., bricks, bonded to each other by a settable material, e.g., mortar.
- 474+, for a facer, e.g., panel, supported by a sustainer, i.e., elongated load-bearing structural component, particularly subclasses 484+, for a suspended ceiling of edge abutted panels (sometimes called tiles).
- 506.01+, for another construction having facers attached to another in situ erected substructure.
- 518+, for lapped multiplanar (shingle type) facing.

  DIG 16, for a tie or shingle with

cover means for adhesive on it.

#### SEE OR SEARCH CLASS:

- 156, Adhesive Bonding and Miscellaneous Chemical Manufacture, appropriate subclass for processes of bonding discrete lamina to a single face of another lamina, particularly subclass 71 for bonding lamina to a previously erected building structure.
- 428, Stock Material or Miscellaneous Articles, appropriate subclasses for a single or plural layer stock material product which does not have a physical feature or a mechanical connector for cooperation with a panel or a supporting substructure.
- 385 This subclass is indented under subclass 384. Structure including means attaching the ties or backer to a supporting substructure other than the backer.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 344+, for a settable material receiving backer attached to a furring, joist or stud.
- 478, for a lapped multiplanar surfacing attached to substructure.
- 386 This subclass is indented under subclass 384. Structure in which the backer has integral projections for connecting the tiles to the backer.
- This subclass is indented under subclass 386. Structure in which the projections engage the peripheral edges of the tile.

388 This subclass is indented under subclass 384. Structure in which the backer is formed of interwoven or crisscrossed strands, e.g., woven fabric, wire mesh.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 343, for spaced slat type lath connected by filaments.
- 660+, for a residual fabric or lattice type openwork structure.
- 389 This subclass is indented under subclass 384. Structure including a material which is initially flowable but sets to rigidity, the tiles being partially embedded in the material while it is in the unset condition.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 315, for an ornamental facing feature formed by revealed embedded discrete elements.
- 366, for an adhesively secured ground member.
- 390+, for a facing of tiles held by an adhered to substructure other than a sheetlike nonload-bearing backer and tiles, per se, peculiar to such use.
- 416, for lapped multiplanar or strip covered joint surfacing held by flowable material applied in situ, e.g., an adhesive.
- This subclass is indented under the class definition. Structure including (1) a thin, nonload-bearing veneer facing tile having features on a face cooperating with an adhesive, e.g., mortar, which attaches it to a substructure, or (2) such a tile held by an adhesive to a substructure which extends beyond the edges of the tile, the tiles in use being arranged edge-to-edge.

- 378+, for a load-bearing monolith with a coextensive section held by a tie.
- 384+, for a tile held by a preformed sheetlike, nonload-bearing backer, particularly subclass 389 for tiles embedded in a settable backer and see notes.
- 415, for modules bonded to each other by internal cast in situ section.

- 596+, for a module with individual coextensive preformed section.
- 391 This subclass is indented under subclass 390. Structure wherein said facing tile has additional discrete securing means, e.g., a clip or an embedded projecting tie.
- 392 This subclass is indented under subclass 390. Structure wherein said tiles have deformations integrally formed at the edges thereof to facilitate the engagement and/or spacing of the tile with adjacent tiles.

- 589.1+, for a module with edge engaging keys of more general application.
- for an opaque stone-like module with monolithic spacing projections.
- This subclass is indented under the class definition. Structure including fixedly related juxtaposed components with a substantial area of the opposed faces of the components being spaced from each other by a preformed, yieldable separator which is compressed between and acts to resiliently resist movement of the components towards each other.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 140+, for a burial vault with sealing material between its closure and the vault body.
- 167.1+, for means compensating earth-transmitted force, e.g., an earthquake.
- 208, for a closure panel directly clamped or sealed to a barrier.
- 214, for a retaining feature incorporating a resilient strip between a frame and a portal opening.
- 346, for means accommodating movement of a settable material backer with a spring.
- 502, for an interfitted facer and shaft with a springy strip type retainer.
- 573.1, for a residual structure having means accommodating expansion or contraction.

#### SEE OR SEARCH CLASS:

- 49, Movable or Removable Closures, subclasses 475.1+ for a closure seal, e.g., striker gasket or weatherstrip and see the search notes thereto for the loci of other seals.
- 220, Receptacles, subclass 614 and 681 for a packing element for a receptacle joint.
- 277, Seal for a Joint or Juncture, for a generic sealing means or process, subclasses 628+ for a static contact seal for other than an internal combustion engine, or pipe, conduit, or cable.
- 280, Land Vehicles, subclass 153.5 for a joint welting between running board, molding or dust guard and a vehicle body.
- 394 This subclass is indented under subclass 393. Structure which in the yielding separator lies between overlapping edges portions of lapped-multiplanar surfacing sections.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 518+, for a residual lapped multiplanar surfacing.
- 395 This subclass is indented under subclass 393. Structure in which the yielding separator lies between a strip bridging the juncture of or space between the edges of edge-to-edge related cover sections.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

459+, for a residual construction including a bridger strip covering the juncture of panels.

### 396.01 Fire or heat resistive-type (e.g., for furnace wall):

This subclass is indented under subclass 393. Separator which is designed to withstand the temperature of; e.g., combustion, melting.

### 396.02 Separator inserted prior to or during pouring of two adjacent concrete sections:

This subclass is indented under subclass 393. Separator which is installed before or while pouring a settable material.

 Note. Included in this subclass are joints made by removable forms with an insertable separator.

### 396.03 Including a collapsible-cell (e.g., hollow), bight, or accordion-shaped portion:

This subclass is indented under subclass 396.02. Inserted separator which contains a yieldable portion that is (1) an air enclosing compartment, (2) a web of material having a bend for slack, or (3) pleated.

# 396.04 Exposed separator between (1) set or cured concrete, (2) metal, wood, plastic, etc., or (3) prefabricated components:

This subclass is indented under subclass 393. Joint which is in contact with the ambient atmosphere (i.e., uncovered) and installed in a gap amid (1) at least two hardened or cured sections, or (2) components in finished form.

#### 396.05 With embedded anchor means:

This subclass is indented under subclass 396.04. Exposed joint which includes a discrete portion (1) placed in the sections prior to complete hardening or curing, or (2) built-in with the components.

### 396.06 Composed of at least one collapsible cell (e.g., hollow):

This subclass is indented under subclass 396.04. Exposed joint which contains a portion that is an air enclosing compartment.

#### 396.07 Having a bight portion:

This subclass is indented under subclass 396.04. Exposed joint which contains a portion that is bent for slack.

### 396.08 Between (1) brick or block courses, or (2) individual adjacent bricks or blocks:

This subclass is indented under subclass 396.04. Exposed joint which is installed at the horizontal or vertical juncture of a brick or block.

### 396.09 Bricks or blocks designed to receive separator:

This subclass is indented under subclass 396.08. Exposed joint for bricks or blocks in which the bricks or blocks are fabricated with a portion to accept the separator.

#### 396.1 Between tile-type components:

This subclass is indented under subclass 396.04. Exposed joint which is between thin relatively rigid hand-carried modules.

402 This subclass is indented under subclass 393. Structure in which a yieldable separator member is held or supported by another member which acts to space the yieldable member from one of the separated components.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

480, for another face-to-face barrier section construction with a spacing sleeper or subflooring.

### 403.1 UNDERLYING COMPRESSIBLE LAYER OR PAD (E.G., FLOOR SYSTEMS):

This subclass is indented under the class definition. Structure in which a discrete lamina or a thin flat mat allows for relative movement between two planar surfaces; e.g., a traffic bearing surface and its substructure.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, appropriate subclasses for a stock material product, in the form of a plural layer product, in which one layer is resilient, particularly subclasses 455+ for a cork layer and subclasses 492+ for a natural rubber layer.

## 404.1 INSULATING INSERT; E.G., FILLER IN CAVITY IN PRECONSTRUCTED OR CAST STRUCTURE:

This subclass is indented under the class definition. Structure including a cavity within a wall, ceiling, or floor and a discrete filler body of insulating material within said cavity, differing in kind from that of the barrier, which material tends to inhibit the passage of heat and/or sound therethrough.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

17. for an insulated car roof.

144+, for an exposed surface having an acoustical function.

167.1+, for means compensating earth transmitted force.

- 265, and 267+, for a plural intersection construction with a layered barrier.
- 317, for a draft stop between studs.
- 347, for isolating means on the supported side of a settable material backer which is fixed to a furring, joist, or stud.
- 393+, for a relatively yielding preformed means compressed by abutting components.
- 408+, for a dividing sheet form sheet lamina between components.
- 424+, for laterally related modules bonded by internal settable material section (e.g., mortar).
- 479+, for back to back sections spaced by framing.
- 576+, for a cavity former within a module and embedded-type void former.
- 742.1+, for a process of filling a preformed cavity in an in-situ construction.
- 783.1+, for a sandwich or hollow panel.

### 404.2 With retaining means penetrating insulating layer:

This subclass is indented under subclass 404.1. Insulating insert including filler piercing means or means intertwining with the filler to effect holding the filler in a desired position in the cavity.

### 404.3 With divider between and holding insulating laver:

This subclass is indented under subclass 404.1. Insulating insert including a discrete means for retaining and supporting the insulation in spaced apart cavities.

### 404.4 Composed of modules having complementary abutting edges:

This subclass is indented under subclass 404.1. Insulating insert where a section containing the insulating filler (body) includes a portion adapted to fit into and contact a receiving portion of an adjacent section.

### 404.5 Insulation suspended from discrete member (e.g., rod) within cavity:

This subclass is indented under subclass 404.1. Insulating insert wherein the filler body of insulation material hangs from a support within the cavity.

### 405.1 Stonelike-type (e.g., concrete, masonry) shell:

This subclass is indented under subclass 404.1. Insulating insert in which the barrier is or contains, as a primary component, a settable material, e.g., concrete.

#### 405.2 Shell having end interfitting means:

This subclass is indented under subclass 405.1. Insulating insert shell including a module having features such as projections and depressions on at least one side thereof that align with similar features of adjacent modules for connecting the modules together.

#### 405.3 Having reinforcement in shell or insert:

This subclass is indented under subclass 405.1. Insulating insert shell wherein a means of stiffening such as a rod, cage, or grid-type network is located in the shell, cavity, insulation, or any combination thereof.

#### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 438, for modules mutually bonded by settable material including dissimilar material member in section.
- 600+, for stonelike modules including elongated reinforcing.

#### 405.4 Insert having aligning feature:

This subclass is indented under subclass 405.1. Insulating insert shell wherein the filler body within a block has features that position adjacent or subjacent blocks.

#### 406.1 Enveloped-type filler:

This subclass is indented under subclass 404.1. Insulating insert wherein the filler body of insulating material is covered by means surrounding at least four sides thereof.

#### **406.2** Self-contained insulating unit:

This subclass is indented under subclass 406.1. Enveloped filler wherein the filler material is within a specific wrapping.

#### 406.3 Insert containing chamber:

This subclass is indented under subclass 406.1. Enveloped filler wherein the insulating filler includes spaced apart air-enclosing cells or compartments.

#### 407.1 Filler spaced from inside face of cavity:

This subclass is indented under subclass 404.1. Insulating insert wherein there is a vacant space between at least the major surface of one inside wall of the cavity and the filler.

### 407.2 Filler suspended by supporting means surrounding at least four sides thereof:

This subclass is indented under subclass 407.1. Spaced filler wherein the perimeter surfaces of the filler are held in spaced relation from the structure by; e.g., chains, springs, or clips (Dyar patents).

### 407.3 Filler pieces within barrier frame (e.g., rafter, joist):

This subclass is indented under subclass 407.1. Spaced filler wherein the insulation filler is positioned in spaced apart spaces formed by supporting means of the barrier.

### 407.4 Means (e.g., fastener) to position insulation via supporting means for the barrier:

This subclass is indented under subclass 407.1. Spaced filler where the insulation means is being held stationary adjacent or in spaced relation to the barrier by a fastener (e.g., clip), or load bearing member (e.g., purlin).

### 407.5 Insulation defines air enclosing cell or compartment:

This subclass is indented under subclass 407.1. Spaced filler wherein the insulating filler forms spaced apart air-enclosing chambers.

- This subclass is indented under the class definition. Structure in which a construction assembled at the job site includes a sheet form member which is imperforate except for openings accommodating preformed means, e.g., ties, the member being held between opposed surfaces of components or layers which are made of a material which differs in kind from that of the member, with the major faces of the member being in contact and substantially coextensive with the opposed surfaces of the components or layers or are embedded in a bonding material between such surfaces.
  - (1) Note. Dividing laminae, per se, having features on opposed surfaces for retaining opposed layers are in this or the indented subclasses.

(2) Note. Search appropriate subclasses, below, for other layered constructions.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 58+, for a flashing extending outwardly of the exposed face of a wall.
- for a construction with a defined animal blocker.
- 135, for a layered burial vault.
- 249, for a transversely layered curvilinear barrier.
- 265, and 267+, for a plural intersection construction involving a layered barrier.
- 302.5, for a drain passage formed by a preformed separator.
- 347, for a construction having isolating means between a settable material backer and a sustainer.
- 380+, for a cast barrier with insulation within an isolated cavity.
- 393+, for a construction with a relatively yieldable separator.
- 404.1+, for an insulating insert within a cavity in a preconstructed or cast structure.
- 415+, for a construction formed by facers separated by a bonding cast section.
- 459+, for a bridger strip over a panel juncture.
- 479+, for face-to-face barrier sections separated by a sustaining shaft.
- 561+, for a construction of laterally related individually assembled courses.
- 720.1+, for a shaft with a dissimilar material
- 782.1+, for a residual composite panel.

#### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, appropriate subclasses for a stock material product of single or plural layers and having no structural feature for connection to an adjacent building structure.
- This subclass is indented under subclass 408. Structure in which the sheet form separator is between the lapped portions of components forming multiplanar surfacing.

414

SEE OR SEARCH THIS CLASS, SUBCLASS:

394, for a similar construction wherein the separator is resilient.

518+, for a residual lapped multiplanar surfacing.

This subclass is indented under subclass 408. Structure including means tying the layers or components together and extending through or around an edge of the dividing member.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

353, for a construction wherein a tie crosses opposed backers for settable material.

383, for a cast in situ spaced barrier section with a dissimilar tie.

411 This subclass is indented under subclass 408. Structure including an additional material which bonds the layers of the construction and also a dissimilar material tie acting between the layers.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

415+, for another construction of more general application having an internal cast bonding section, e.g., brick and mortar.

- This subclass is indented under subclass 411. Structure wherein the sheet form separating member extends into intersecting joints between one layer or component and two other layers or components, e.g., nonporous members positioned within the mortar along one horizontal side and one vertical side of a brick in a brick wall.
- This subclass is indented under subclass 411.

  Structure wherein the sheet form separating member has a generally planar face with integral projections extending from said face.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

443+, for an imperforate backer having means therewith for retaining a cast layer or facing on said backer.

This subclass is indented under the class definition. Structure including a poured-in-place barrier having an elongated rigid primary loadbearing member and an additional secondary different form reinforcement completely embedded in the poured material.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

223.1+, 231, 250+, 318, 319+, 378+, 380+, and 404.1+, for another reinforced poured in place structure.

740.1+, through 740.9, for a rod which is usually used as concrete reinforcing.

#### SEE OR SEARCH CLASS:

405, Hydraulic and Earth Engineering, subclasses 233+ for a process or apparatus for installing a cast in situ pile or pier; subclass 257 for a cast in situ pile or, per se; and subclasses 267+ for subject matter relating to earth treatment and specifically the formation of an underground wall of cementitious material.

This subclass is indented under the class definition. Structure including a plurality of assembled preformed modules or facer sections and an applied-in situ section of initially fluid but subsequently set bonding material which lies within the outer perimeter of the construction and serves to adhesively bond the modules together, e.g., brick and mortar or adhesively secured facers.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

140+, 216, 250+, 318, 319+, 389, 390+, and 443+, for another structure involving elements bonded together by settable material.

This subclass is indented under subclass 415. Structure wherein the settable material bonds together (1) the lapped edge sections of cover sections or (2) a bridger strip over the juncture of coplanar end-to-end related panels.

#### SEE OR SEARCH THIS CLASS, SUB-CLASS:

459+, for another construction having a bridge strip over a panel juncture.

518+, for another lapped multiplanar surfacing.

This subclass is indented under subclass 416. Structure including a preformed strip of a material or configuration different from the material or configuration of the sections, which strip overlaps or engages the edge portions of a pair of adjacent sections and is secured thereto by the flowable material or cooperates with the flowable material.

This subclass is indented under subclass 416.
Structure including means for fastening plural surfacing sections together, said means being embedded in the flowable material.

SEE OR SEARCH THIS CLASS, SUBCLASS:

698+, for an anchor or tie and see search notes for other subclasses utilizing a tie.

This subclass is indented under subclass 416.
Structure wherein the fluid material is applied between superimposed elements.

SEE OR SEARCH THIS CLASS, SUBCLASS:

516, for superimposed layers of fluid material continuous therewith and not defined as acting as an internal bond but merely as a coating.

- 420 This subclass is indented under subclass 419. Structure in which fluid material only covers part of a surfacing section, usually a surfacing strip edge.
- This subclass is indented under subclass 415.

  Structure including a member in or adjacent to a joint, which member acts between modules to stop the flow of the material of a cast section into a hollow of at least one of the modules.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

381+, for a structure having a lined cavity within a cast in situ barrier.

411+, for an internal type flashing within a cast bonding section which may form a mortar dam.

This subclass is indented under subclass 415.

Structure wherein the exterior of a module is so constructed as to facilitate the attachment of additional materials on an exposed face of the resulting construction.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

327+, for a ribbed type barrier with additional coextensive section.

344+, for a settable material receiving backer fixed to elongated sustainer.

for a block type backer with feature for retaining plaster type facing.

423 This subclass is indented under subclass 415. Structure wherein the assembled preformed modules form a straight, rigid construction having a limited closed periphery, said construction being greatly elongated relative to any lateral dimension and having a shell or covering which is made up of said modules.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

724, 725 and 727+, for a similar structure with a core within a dissimilar material shell.

This subclass is indented under subclass 415.

Structure wherein bonded modules are arranged in contiguous, back-to-back position relative to the depth dimension (distance from major face to major face) of the construction.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

561+, for another construction of laterally related module courses which are not bonded.

- Structure wherein the laterally related modules contain therebetween a cast monolith which is continuous both vertically and longitudinally of the construction, i.e., fills a hollow wall formed by coextensive module courses.
- This subclass is indented under subclass 425. Structure wherein the laterally spaced modules are connected together by a tie member.

698+, for an anchor or tie, per se, and see the search notes for other subclasses containing a construction utilizing a tie.

This subclass is indented under subclass 424. Structure wherein the laterally related modules are spaced apart and have members extending transversely therebetween, which members act as forms for a cast in situ section, said members being made of a material differing in kind from the preshapes.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

421, for structure utilizing a hollow module and a dam for the cast bonding section.

428 This subclass is indented under subclass 424. Structure including a distinct separately placeable member extending transversely between the laterally related modules with at least the ends thereof engaging the modules, which member is bonded to the modules by the cast section.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

698+, for an anchor or tie, per se, and see the search notes for other subclasses containing a construction utilizing a tie.

This subclass is indented under subclass 424. Structure wherein the modules have flanges formed integrally therewith, which flanges cooperate with flanges of opposed modules and function as forms for the cast in situ section, the flanges and modules enclosing the cast in situ section.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

569+, for construction including preshapes with opposed lateral monolithic projections.

430 This subclass is indented under subclass 424. Structure including integral opposed projections on the modules, which opposed projections are in overlapping relationship with the

cast section bonding the opposed projections to each other.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

429, in which flanges on modules enclose a cast section.

431 This subclass is indented under subclass 424. Structure including reinforcing elements embedded in the modules, which elements have ends or portions projecting from the body of the modules which are embedded in the cast section.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

582.1+, for a related construction or component thereof having projecting reinforcing means.

432 This subclass is indented under subclass 415. Structure including reinforcing elements in the modules having the ends or a portion thereof projecting into the spaces between the modules and anchored within the cast section.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 155, for intersections with cast material at the juncture of modules.
- 431, for similar construction involving laterally related modules.
- 698+, for an anchor or tie, per se, and see the search notes for other subclasses relating to a construction utilizing a tie.

433 This subclass is indented under subclass 415. Structure comprising an elongated rigid construction formed of a plurality of modules bonded in end-to-end relation, which construction includes (1) a nonuniform or eccentrically positioned reinforcement or (2) a cross-sectional shape of such special form that it rigidities the construction and resists forces or loads applied normally of its longitudinal axis.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

721.1+, for other transverse load resisting stone-like sustainers.

434 This subclass is indented under subclass 415. Structure in which the facers are fixed to an elongated, rigid preformed, load bearing member and the section either (1) bonds the member or (2) bonds the facers to each other.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

474+, for other like structure lacking the cast in situ bonding section.

- Structure in which the elongated member includes a web and flange portion, which portion is at least in part embedded within the cast section.
- 436 This subclass is indented under subclass 415. Structure wherein the modules include integral edge means which cooperate in interfitting relationship, e.g., tongue and groove, with corresponding complementary integral means on adjacent modules, with the section occupying a space between the complementary means and bonding the modules together.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

595, for a module with tongue-and-groove keying means defining an internal space which may receive mortar.

- 437 This subclass is indented under subclass 415. Structure wherein the modules have channels defining edge grooves, which are in opposed relation on adjacent modules with the cast section occupying the space defined by the opposed grooves.
- 438 This subclass is indented under subclass 437. Structure including a distinct member differing in material or form from the modules, which member is within the section.
- 439 This subclass is indented under subclass 415. Structure wherein the modules are hollow or channel shaped and the section fills the hollow or channel of the modules to form a continuous cast section.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 421, for a mortar dam structure there provided for.
- 436, and 437+, for another related construction wherein the cast section fills hollows or channels.
- 440 This subclass is indented under subclass 415.

  Structure including means, e.g., an integral flange or separate plate, which cooperates with a similar means on the adjacent module to close one side of the space between the adjacent module and to overlie or cover one surface of the cast section.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 324, for a ribbed construction wherein the means covers and underlies a cast rib-like sustainer between filler blocks.
- 437+, for structure wherein opposed sides of channel sections enclose a cast section.
- This subclass is indented under subclass 440. Structure wherein the section covering means comprises a member which is separate from the module.
- This subclass is indented under subclass 415.
  Structure wherein a distinct member is embedded in the section disposed between adjacent modules.

- 340+, for a construction with projectingribs of a cast in situ barrier enclosing a sustainer.
- 438, for a construction wherein the cast section is formed by opposed channels in the modules.
- This subclass is indented under the class definition. Structure including a backer which is imperforate over a substantial area and which has a feature on a major face for retaining a settable material, e.g., plaster facing.

- 144+, for a structure having a surface physically modified for acoustical purposes.
- 316, for a structure with integral relief ornamental facing feature.
- 342+, for openly spaced slat type lath.
- 344+, for a settable material receiving backer fixed to furring, joist or stud.
- 408+, for an imperforate dividing lamina between components of in situ construction.
- 415+, for a module bonded to internal cast in situ sections.
- 515+, for surfacing with a uniform coextensive fluid material coating.
- 660+, for a fabric or lattice type openwork which may receive a settable material.
- 444 This subclass is indented under subclass 443. Structure including juxtaposed block-like units having integral means on an exposed face for retaining settable material.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 422, for constructions of modules bonded to an internal cast section which modules have a settable material retaining feature on an exposed face.
- 605, for block having grooves on a juncture surface.
- 445 This subclass is indented under subclass 443. Structure including discrete particles adhered to the backer, e.g., a coating with particles of gravel adhered thereto, for bonding with a water-settable material.

#### SEE OR SEARCH CLASS:

- 427, Coating Processes, subclasses 180+ for processes of coating, per se, wherein solid particles or fibers are applied to a substrate.
- 446 This subclass is indented under subclass 443. Structure including an initially fluid coating which differs in kind from the retained settable material, i.e., a coating of the type commonly referred to as paints, lacquers or enamels.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 445, for a like construction wherein the coating retains discrete particles.
- 515+, for another structure utilizing a disparate material coating.
- 447 This subclass is indented under subclass 443. Structure in which the backer is made of plural rigid sheetlike sections including discrete means or integral configurations which connect them in edge-to-edge relationship.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 578+, for another construction or a panel involving a discrete edge-to-edge connecting feature.
- 448 This subclass is indented under subclass 447. Structure including a physical configuration of opposed edges of sections which mutually interengage.
- 449 This subclass is indented under subclass 443. Structure in which the backer has a core of rigid water-settable material which is covered by an apertured sheet of material of a different kind, which sheet is adhered to the core.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 408+, for a panel including a sheet faced on both sides by other material.
- 782.1+, for another composite panel of facially contacting sheets.

#### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclasses 131+ for a stock material product in the form of a single or plural layer web or sheet and in which at least one component is apertured.
- 450 This subclass is indented under subclass 443. Structure wherein the backer includes a sheet which is shaped to form continuous alternating ridges and grooves on opposed faces.

- 453, for a backer having a groove formed into a face.
- 630, for a residual corrugated panel.

#### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclasses 156+ for a stock material product having a component of varying thickness for that class (428), particularly subclasses 163 and 167+ for such a product having parallel ribs and grooves, and subclasses 174+ for a stock material having a nonplanar uniform thickness component, particularly subclasses 182+ for a corrugated component.
- This subclass is indented under subclass 450. Structure wherein the sheet has secured thereto a flat-surfaced sheet in coextensive contact therewith.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

408+, for an imperforate sheet laminated between opposed material layers.

- This subclass is indented under subclass 450. Structure including a filament, e.g., wire or cord, extending transversely of the ridges and grooves.
- 453 This subclass is indented under subclass 443. Structure wherein (1) the backing member has a groove formed in a face thereof or (2) a groove formed by a configuration of the abutting edges of plural backers, said grooves serving to aid in retaining the settable material.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

450+, for a corrugated backing member. 605, for another module with grooves on a juncture surface.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 163 and 167+ for a stock material for that class having a component which varies in thickness in the form of parallel ribs or grooves.

454 This subclass is indented under subclass 443. Structure in which a filament or a mesh type sheet, e.g., expanded metal, is attached to the backer.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 452, for corrugated backer with transverse filament.
- 661, for a foraminous open-work sheet with attached filaments.
- 676, for mesh-type open-work with attached discrete bodies.
- This subclass is indented under the class definition. Structure including an assemblage of elongated members defining a border which (1) encompasses two or more edge-to-edge related panel members or (2) encompasses a single panel which carry strips and thus presents the appearance of panels arranged as in (1) the structure as a whole presenting an imperforate face, e.g., a sectioned door panel or multi-light sash.

- 459+, for another structure with a bridger strip over a panel juncture.
- 475.1+, for a single panel within a peripheral frame.
- 656.1+, for cornered or peripherally bordered open frame.
- 456 This subclass is indented under subclass 455. Structure including two or more crossing or intersecting strips which terminate at the elongated border members, which strips separate the panels from each other.
- This subclass is indented under subclass 455. Structure wherein the panel members form a sectioned face having edge-to-edge abutted panel components.
- This subclass is indented under subclass 457. Structure wherein flanges on the edges of the abutting panel components are interconnected to form the sectioned face.

588.1, for plural panels with interfitted lateral flanges.

459 This subclass is indented under the class definition. Structure in which the edge juncture of edge-to-edge abutted or spaced panel-like components is covered by a prefabricated sealing, concealing or protective bridger strip not serving primarily as a load-bearing shaft.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

417, for a construction wherein a bridger strip is bonded to surfacing sections.

460 This subclass is indented under subclass 459. Structure wherein the panel-like components are attached to an arrangement of supporting members in a defined spaced or crossing relationship, e.g., roofing on rafters or wall boards on studs.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

474+, for another construction wherein facers are structurally related to elongated rigid member, usually a load-bearing member, e.g., column or beam.

461 This subclass is indented under subclass 459. Structure wherein in addition to the bridger strip there is another elongated member which usually is a sustainer, e.g., column or beam.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

49, for a carline beneath and a cover strip above a joint in a car roof.

462 This subclass is indented under subclass 461. Structure wherein the plural elongated members cooperate with the juncture, formed by overlapping cover sections, the overlapping portions being in contact.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

518+, for another construction of lapped multiplanar cover sections.

463 This subclass is indented under subclass 461. Structure including a fastener which holds the bridger strip to either a panel, the elongated member or both with the fastener being separable, at least in part from the component held.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

698+, for an anchor or tie, per se, and see the search notes for other subclasses relating to a construction utilizing a tie.

This subclass is indented under subclass 463. Structure in which a part of the bridger strip extends into a space between the panel edges.

465 This subclass is indented under subclass 459. Structure in which the elongated member is a cap-like member which covers the joint between contiguous edges of the sections and is disposed on and extends at least in part beyond the exposed surfaces of the sections.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

417, for cover strip at juncture of sections held by adhesive.

466 This subclass is indented under subclass 465. Structure including a separate and distinct anchor means other than the cap or sections which means serves to hold the cap and sections in position relative to another element.

467 This subclass is indented under subclass 466. Structure in which a portion of the anchor means extends completely through the cap which covers the joint mean.

This subclass is indented under subclass 465. Structure wherein a portion of the cap extends between spaced coplanar edges of the sections.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

464, for a construction having two elongated members and a bridging strip with a portion of the bridging strip extending between panel edges.

This subclass is indented under subclass 465. Structure wherein the entire cap is outside of the sections, i.e., rests on exterior surfaces.

49, and 52, for a similar structure in a car roof construction.

470 This subclass is indented under subclass 459. Structure in which the elongated member covering the joint between sections has means interfitting with at least one of the sections.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

519+, for interfitted lapped multiplanar surfacing sections.

- This subclass is indented under subclass 470.
  Structure wherein at least a portion of the elongated member is disposed in a recess of one of the sections.
- This subclass is indented under subclass 471. Structure wherein the recess in the section is formed by deforming the section in situ while its cross-section is maintained substantially uniform.
- This subclass is indented under the class definition. Structure including a set of plurality of slat-like sections which are inclined relative to a plane defined by the terminal edges of the set and which are arranged in facially spaced parallel planes so as to form openings between the slats.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

74+, for rigid awning type constructions which often include louvered surfacing

660+, for other fabric or lattice type open work space.

#### SEE OR SEARCH CLASS:

- 49, Movable or Removable Closures, subclasses 74.1+ for louver type closures interconnected for concurrent movement.
- 160, Flexible or Portable Closure, Partition, or Panel, subclasses 166.1+ for venetian blind type panel.
- 454, Ventilation, subclass 221 for a louvered ventilating panel associated with a window, subclasses 265+ for a

louvered ventilating panel associated with a structure for mixing plural air streams together, subclasses 277+ for a louvered panel associated with a cover or shield for an exterior vent opening, subclasses 309+ for a louvered air distributor, subclasses 335+ for a louvered damper, subclasses 358+ for a louvered ventilating panel associated with a pump driven air exhaust, and subclass 358 for a louvered panel associated with an air outlet, per se.

### 474 FACER HELD BY STIFFENER-TYPE FRAME:

This subclass is indented under the class definition. Structure including a panel section which is fixedly positioned to a generally elongated member (e.g., sustainer) acting to support or rigidify the panel,in use, which member is part of a larger structure; e.g., building frame, with the structure of the final assembly being such that the panel must first be assembled to and then fastened to the member.

(1) Note. Included in this subclass would be sheets directly attached to the bottom joists or beams of the floor above to form a ceiling.

- 45, for a car roof with carline or ridge member.
- 90.1+, for an inclined cover with supporting substructure.
- 238.1+, for a partition secured to a preconstructed barrier.
- 272+, for a construction forming the intersection of columns, walls, floors, ceilings or roofs.
- 319+, for a cast in situ construction, e.g., concrete, with projecting rib-type sustainer.
- 344, for a settable material backer fixed to a furring, joist or stud.
- 364, for a construction with a sustainer having a penetrating fastener receiving feature.
- 434+, for a module bonded to internal cast in situ section and including a sustainer.
- 461+, for a bridger strip and sustainer at edge juncture of panels.

- 473, for a construction which exhibits openings between the leading and trailing edges of inclined slats.
- 478, for lapped multiplanar or strip covered surfacing attached to substructure arrangement.
- 506.01+, for a facer attached to another in situ erected substructure which differs in kind from the facer.
- 578+, for a module with discrete edgewise connecting feature.
- 800.1+, for a composite panel with a separately attached edging which is assembled to it, e.g., a composite manually manipulable wall panel, table top, etc.

### 475.1 Self-supporting section (e.g., facing) attached to nonload bearing framing:

This subclass is indented under subclass 474. Facer with frame including a preassembled panel surrounded by sustainer-type members and attached to an existing structure (e.g., facade).

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 235, for a curtain wall-type structure.
- 384+, for tiles positioned by nonload-bearing holding means.
- 390+, for adhered tile-type facer.
- 455+, for sectioned imperforate facing within peripheral frame.
- 578+, for a module with discrete edgewise connecting feature.
- 656.1, for an open frame; i.e., one without a surrounded panel, which frame is defined as forming a complete frame or definite corners thereof.
- 782.1+, for another edged panel usually a type which is portable and wherein the edging is assembled onto the panel.
- 476 This subclass is indented under subclass 475. Structure in which at least one of the elongated components of the frame is held by defined means which allows it to be readily removed so that a panel, usually a broken pane, can be removed or replaced.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 489, for a construction defining only a single frame member having a separable retainer for a panel or pane.
- This subclass is indented under subclass 475. Structure in which either the facer or a frame component is primarily stone-like material, usually concrete, which component is sufficiently heavy, strong and rigid to act as a support for other components against their weight or to resist transverse loading.
- 478 This subclass is indented under subclass 474. Structure including panels or modules, e.g., shingles with overlapping edges to form a surfacing attached to load supporting members in a specifically defined spaced or crossing relationship.

### SEE OR SEARCH THIS CLASS, SUB-CLASS.

- 90.1+, for an inclined roof with a supporting substructure.
- 416+, for a bonded lapped multiplanar surfacing.
- 459+, for a surfacing having a bridger ship over the juncture of surfacing sections
- 518+, for another lapped multiplanar surfacing.
- 479 This subclass is indented under subclass 474. Facer with framing including an additional panel section structure which is coextensive with a previous panel type structure on opposite side of a sustainer.

- 22+, for a ceiling construction vertically spaced from roof sections.
- 202+, for an auxiliary shield attached to main panel, e.g., storm window.
- 204.52, for a drained or vented hollow space.
- 265, and 267+, for a laminated barrier, e.g., wall in a construction having plural intersections.
- 275+, for laterally related modules forming a barrier intersection.

- 327+, for a construction having an additional coextensive section fixed to a rib of a cast, e.g., concrete barrier.
- 344+, for a settable material receiving backer, e.g., lathe, fixed to furring, joist or stud.
- 384+, and 390+, for a veneer tiling type construction and related tiles, per se.
- 424+, for laterally related modules bonded to each other.
- 480 This subclass is indented under subclass 479. Structure including strips or a coextensive discrete section which spaces and supports the additional coextensive section laterally of (usually above) the principal construction formed by sustainers and modules.

364+, for an anchored ground member acting as a screed or receiver for a penetrating fastener.

### 481.1 With vertical support (e.g., stud) between facers:

This subclass is indented under subclass 479. Parallel panel-type facers and concealed framing wherein the facers have a portion of their unexposed surfaces fastened to an upright sustainer-type support; e.g., a stud hidden within a wall.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

506.04, for a furnace-type double wall

#### 481.2 Demountable type (e.g., partition):

This subclass is indented under subclass 481.1. Vertical support between back to back sections in which the panel-type sections and supporting means are designed to be disassembled from a floor or ceiling.

This subclass is indented under subclass 474. Structure including means attached to or integral therewith which is permanently deformed, i.e., beyond its elastic limit, to grip the facer.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

356, for a furring, joist or stud structurally modified to engage a settable material backer.

364+, for a member serving as a receiver for penetrating fastener which may deform it.

#### 483.1 Facer back abuts and conceals frame:

This subclass is indented under subclass 474. Facer and section with framing in which an unexposed face of a panel section structure both (1) opposite the front or exposed face and (2) hidden by panel edges, is directly fastened to a sustainer-type support.

(1) Note. The underlying frame may be hidden by the adjacent panel edges.

#### 489.1 Including clip-type fastener:

This subclass is indented under subclass 483.1. Facer and underlying frame including a clasping-type connector which engages the section, frame, or both.

#### 489.2 Having a prong-type portion:

This subclass is indented under subclass 489.1. Facer and underlying frame fastener in which the fastener includes a pointed part (e.g., tooth, barb, penetrant portion, tang, impaling point) intended to puncture the section or the frame.

This subclass is indented under the class definition. Structure including (1) modules each having an internal through passage or (2) channel shaped modules which are placed in channel- to-channel facing relationship to form a through fluid passage parts (1) or (2) being juxtaposed to form a barrier with a continuous passage traversing the juxtaposed parts.

- 302.1+, for a construction with a passage from its interior to the ambient and see the references under "SEARCH CLASS" in subclass 302.1 for other constructions having hollows, passages or vents.
- 504 This subclass is indented under subclass 503. Structure including a distinct facing layer formed of solid block-like modules which do not have openings communicating with the continuous passage.

- 270+, for a construction of sectional units enclosing an area.
- 378+, for a cast in situ structure with a distinct section and dissimilar tie.
- 384+, for a facing of veneer tiles held by sheetlike backer.
- 390+, for an adhesively secured facing tile.
- 424+, for bonded together laterally related modules.
- 505 This subclass is indented under subclass 503. Structure wherein the through passages or channels in the modules are located so that they form continuous passages through the barrier in both horizontal and vertical directions, e.g., tortuous or lattice like passages.

# 506.01 SHEETLIKE ELEMENT ASSEMBLED PARALLEL TO EXISTING WALL, CEIL-ING, OR FLOOR (E.G., INSULATING PANEL, SHEATHING):

This subclass is indented under the class definition. Structure including a panel-type element forming an exposed face or major component thereof which element is separate from but assembled to another structure ,e.g., a wall which usually differs in material from the panel, e.g., an upholstery panel fastened to a metal subpanel or a panel section attached to a pre-erected wall, ceiling, or floor.

(1) Note. In most cases the material of the existing wall is dissimilar to that of the wall, ceiling, or floor.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 22, for a defined roof spaced from a ceiling.
- 135, for a burial vault of concentric receptacles with a dissimilar intermediate lamina.
- 202+, for an auxiliary imperforate shield attached to a main panel, barrier, or frame (e.g., storm window).
- 235, for a panel attached outside a floor beam; e.g., curtain wall.
- 249, for a transversely layered curvilinear barrier.

- 265, and 267+, for a construction having spaced intersections and a layered barrier component.
- 275+, for an intersection of barriers at least one of which is composed of laterally related modules.
- 327+, for a cast-in-situ ribbed-type concrete barrier with an additional coextensive section; e.g., a concrete roof with an attached ceiling.
- 344+, for a construction of a settable material receiving backer (plaster board) fixed to an elongated member.
- 364+, for a construction with means specialized to retaining a penetrating fastener which may hold a floor or the like to a beam
- 378+, for a cast-in-situ monolith with an attached section.
- 384+, for a facing of tiles attached to a non-load bearing backer (e.g., grid).
- 390+, for an adhered tile-type facer.
- 408+, for a construction having a disparate lamina between other components.
- 424+, for bonded together laterally related similar modules (e.g., bricks).
- 461+, for edge related panels and a bridger strip related to another elongated member.
- 474+, for a section attached to a pre-positioned frame or shaft.
- 518+, for edge lapped sections which together form a surface, particularly 520 and 543 for such surfacing fastened to a structure.
- 561+, for laterally related individually assembled courses of generally similar modules.
- 612, for a stonelike module with layered components.
- 698+, for an anchor or tie, per se, often used to connect layers of a barrier construction.
- 782.1+, for a composite panel with a disparate edge or imperforate facer.

#### **506.02** For furnace or refrigeration:

This subclass is indented under subclass 506.01. Sheathing or insulator in which the panel is designed to inhibit the transfer of temperature therethrough to hold or maintain a temperature.

(1) Note. Included in this subclass are constructions with a heating means.

#### 506.03 Mounted on frame:

This subclass is indented under subclass 506.02. Furnace or refrigerator elements in which the panel is fixedly positioned to a generally elongated member (sustainer) acting to support or to rigidify the panel.

#### 506.04 Double wall, ceiling, or floor:

This subclass is indented under subclass 506.03. Furnace or refrigerator elements on a frame including an additional planar structure fixed to one side of the member, wherein said structure is coextensive with a previous wall, ceiling, or floor fixed to the other side of the member.

SEE OR SEARCH THIS CLASS, SUBCLASS:

481.1+, for stud between vertical sheetlike sections.

#### 506.05 Assembled with fastening device:

This subclass is indented under subclass 506.01. Sheathing or insulator in which a discrete retaining means fixes the panel or panels to an existing static structure component (e.g., a wall).

SEE OR SEARCH THIS CLASS, SUBCLASS:

518+, for siding or shingle-type fastening devices.

# 506.06 Element spaced from wall, ceiling, or floor and held by discrete retaining means (e.g., suspended ceiling or wall):

This subclass is indented under subclass 506.01. Sheetlike section with framing wherein the sections are distinctly positioned away from a load bearing support by a particular framework.

SEE OR SEARCH THIS CLASS, SUBCLASS:

22+, for specified roof spaced from a ceiling.

235, for a curtain wall-type structure.

327+, for a barrier with a projecting rib-type sustainer combined with an additional section.

344+, for a settable material backer fixed to furring, joist, or studding.

#### 506.07 Inverted T-bar type:

This subclass is indented under subclass 506.06. Retaining means for element where the particular framework has a component shaped as an upside down letter T.

### 506.08 Section designed (e.g., groove, integral hanger) to fasten to retaining means:

This subclass is indented under subclass 506.06. Retaining means for element in which the panel-type section is fabricated with the intention of being fixed to (1) another unique element which is connected to the framework or (2) the framework itself.

### 506.09 Having abutting edges to conceal retaining means:

This subclass is indented under subclass 506.08. Retaining means for a particular section where the edges of two adjacent sections touch in order to hide the framework.

#### 506.1 Edges interfit:

This subclass is indented under subclass 506.09. Edge abutting section where the edge of one section is fabricated to accept a complementary edge of another section.

507 This subclass is indented under subclass 506. Structure in which the module is an openwork panel, e.g., grille or grating.

SEE OR SEARCH THIS CLASS, SUBCLASS:

660+, for a fabric or lattice openwork, per se.

508 This subclass is indented under subclass 506. Structure in which one section including plural facers and a dissimilar in situ erected section together form unoccupied enclosed spaces in a wall, ceiling or floor.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

302.1+, for a construction having a drain or vent which opens to the ambient and see the search notes for other constructions having passages or hollows, particularly 479+ for face-to-face barrier sections spaced by a preposi-

tioned frame or shaft and 503+ for abutted modules of channel or tubular cross-sections which form a barrier with through flow passages.

- 511, for a panel with mounting means thereon attached to another panel which may form a cavity, e.g., upholstered automobile doors.
- 509 This subclass is indented under subclass 506. Structure including a separate fastening means at least part of which is outside of a peripheral edge of a module, e.g., a corner rosette or an edge clamp.
- 510 This subclass is indented under subclass 506. Structure wherein the facers each have a distinct projection monolithically formed therewith and extending from the rear face thereof which projection seats in or on the other structure.
- 511 This subclass is indented under subclass 506. Structure including distinct attaching or mounting means which is rigidly fastened to or integral with the facer.

SEE OR SEARCH THIS CLASS, SUBCLASS:

716.1+, for a similarly attachable trim strip.

- 512 This subclass is indented under subclass 506. Structure wherein the module is attached to the supporting structure by a separate securing element which engages the module and is fixedly held to said supporting structure by a nail or screw type of fastener.
- 513 This subclass is indented under subclass 506. Structure wherein said modules are of stone-like material and have discrete dissimilar tie means acting between them.
- This subclass is indented under the class definition. Structure including a damaged element which has been repaired by the use of an additional element which covers, strengthens or pulls the damaged part together or which element prevents splitting of a part.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

127.1+, for a construction with a means serving only to aid in the assembly or disassembly of the construction.

#### SEE OR SEARCH CLASS:

- 29, Metal Working, subclasses 402.01+ for a residual method of repairing.
- 138, Pipes and Tubular Conduits, subclasses 97+, for such structure with repairing means.
- 144, Woodworking, subclass 330 for a residual process of repairing wood objects.
- 411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 464+ for an impact driven corrugated strip type fastener.

#### 514.5 Using settable material (e.g., grout):

This subclass is indented under subclass 514. Split prevention or repair in which a device is embedded in the static structure with the specific purpose of receiving a thin mortar used for filling spaces, said device then becomes part of the static structure.

515 This subclass is indented under the class definition. Structure including a coating of material which is initially fluid of the type commonly referred to as paints, lacquers or enamels, i.e., coatings of the kind which are applied by a brush, roller or spray.

- 232, for a building structure with an irreversibly reactive component.
- 311.1+, for a construction with an ornamental feature there provided for.
- 415+, for a module or facer bonded by an internal cast in situ section, e.g., mortar.
- 443+, for a plaster type imperforate area backer, e.g., plaster boards, particularly subclasses 444 and 445, for coated backer.
- 740.1+, for an embedded type member with protective coating.

#### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, appropriate subclasses, for a stock material product in the form of a single or plural layer web or sheet (e.g., miscellaneous coated product). The line is: Class 52 takes a base of plural components forming a building construction or single coated building component having defined structural features. This includes a specific backing member with material known as plaster thereon. Class 428 takes a coated base defined by name or material only and of general use.
- 516 This subclass is indented under subclass 515. Structure wherein the initially fluid material is applied in a substantially uniform layer which is coextensive with at least one individual section of a surface formed by lapped cover sections.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 416+, for a lapped section type surfacing wherein the sections are bonded to each other by an internal settable material, e.g., mortar.
- 518+, for a residual surfacing of lapped multiplanar surfacing.
- 517 This subclass is indented under subclass 515. Structure in which the coating is for the purpose of repelling insects, fungi, plants or animals.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 101, for structures forming an animal trap, scarer or physical block.
- This subclass is indented under the class definition. Structure including preshaped sections, e.g., shingles, which together form a facing serving as a cover and having the opposite surfaces of edge portions of adjacent sections in contacting overlapping relationship, with facial portions of the sections at the area of overlap being in different planes.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 416+, for a similar construction where lapped edges are bonded by an adhesive to each other.
- 459+, for a construction wherein a bridge strip covers the edge-to-edge juncture of surfacing panels.
- 473, for a louvered construction, i.e., for lapped inclined slats spaced from each other at the lapped portions.
- 516, for a coated lapped multiplanar surfacing.

#### SEE OR SEARCH CLASS:

- 105, Railway Rolling Stock, subclass 401 for a metal sheathing for railway car wall structure.
- 160, Flexible or Portable Closure, Partition, or Panel, subclasses 130+, for flexibly connected plural strips, slats or panels, e.g., venetian blinds.
- 428, Stock Material or Miscellaneous Articles, appropriate subclasses, for a residual stock material product in the form of a single or plural layer web or sheet, merely defined as a "shingle", "siding", or the like and see especially subclasses 143+ for such a product having a rough or textured surface made up of particulate matter, in which subclass are many patents directed to roofing or shingles.
- 454. Ventilation, subclass 221 for a louvered ventilating panel associated with a window, subclasses 265+ for a louvered ventilating panel associated with a structure for mixing plural air streams together, subclasses 277+ for a louvered panel associated with a cover or shield for an exterior vent opening, subclasses 309+ for a louvered air distributor, subclasses 335+ for a louvered damper, subclasses 358+ for a louvered ventilating panel associated with a pump driven air exhaust, and subclass 358 for a louvered panel associated with an air outlet, per se.

519 This subclass is indented under subclass 518. Structure in which the sections have portions which are shaped to interconnect with each other.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

557+, for an element of lapped joint surfacing which may include tabs or slits.

520 This subclass is indented under subclass 519. Structure wherein a surfacing section is secured to a support or to another surfacing section by a separate retainer located in the area of the overlapped sections.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

276+, for a corner section overlapping and anchored to subjacent intersecting sections.

465+, for a cap-like bridge strip with a separate anchor element.

543+, for anchor lapped multiplanar surfacing construction utilizing a fastener or anchor.

- 521 This subclass is indented under subclass 520. Structure wherein the retainer passes entirely through at least one of the surface forming elements.
- 522 This subclass is indented under subclass 519. Structure wherein at least one of the interfitting portions is resilient and is adapted, when engaged by a portion of the adjacent section, to be biased to a position which will resist separation of the sections.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

482, for a shaft with a permanently deformable type gripping feature.

- 523 This subclass is indented under subclass 519. Structure in which one section is provided with a relatively narrow slit extending inwardly from an edge thereof, which slit receives the marginal edge of the adjacent section.
- 524 This subclass is indented under subclass 523. Structure in which one section is provided with a slit extending inwardly from an edge thereof,

which slit interfits with similarly disposed slit in the adjacent section.

- 525 This subclass is indented under subclass 523. Structure in which one section is provided with a tab which is received by a slit in the other section.
- 526 This subclass is indented under subclass 519. Structure wherein one section is provided with a tab and the other section with an aperture intermediate the edges which receives said tab.
- 527 This subclass is indented under subclass 519. Structure wherein one of the interfitting sections is provided with a tab projecting in the plane of the section from a marginal edge which tab extends over or under the surface of the adjacent section.

#### SEE OR SEARCH THIS CLASS, SUB-CLASS:

525, and 526, for other arrangements of interfitted surfacing sections with tabs.

528 This subclass is indented under subclass 519. Structure in which adjacent sections are held together by an interfitted joint formed by folding, rolling or mutually indenting marginal portions of adjacent sections when installed.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

520+, for facing sections and an anchoring means which may be interfitted by mutual deformation.

529 This subclass is indented under subclass 519. Structure wherein a marginal portion of one of the sections is folded back upon itself so as to define a space and extends under another portion of the same section, the space receiving an interfitting part of the adjacent section.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

520+, for sections which may be interfitted with anchor means by a reentrant fold.

528, for a similar construction formed in situ.

- 530 This subclass is indented under subclass 529. Structure wherein the folded back portion of one of the sections interfits for hooks into a bent portion of the adjacent section, the spaces defined by folded and bent portion opening towards each other.
- 531 This subclass is indented under subclass 530. Structure wherein a flange on an edge of one of the sections extends beyond the joint formed by the oppositely opening spaces.
- 532 This subclass is indented under subclass 529. Structure in which the folded back portion is the corner of its section.
- 533 This subclass is indented under subclass 519. Structure wherein the cross section of the lapped sections at their interconnecting portions are such that a space wall be formed at the joint for conducting a fluid.

- 302.1+, for a construction having a passage between its interior and the ambient and see the subclasses under "SEARCH THIS CLASS, SUB-CLASS": in subclass 302.1 for other constructions with passage forming means.
- 534 This subclass is indented under subclass 533. Structure wherein the sections are formed of sheet material whose full cross section is deformed, e.g., bent or flexed, to provide the interfitting cross sections at the fluid handling joint.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 472, for elongated member interfitted with a deformed section.
- 528, for a lapped multiplanar section construction wherein interfitting sections are folded, rolled or indented in situ.
- 535 This subclass is indented under subclass 519. Structure wherein one of the sections has at least three planar surfaces, two of which are consecutively offset transversely in the same direction from the first, i.e., in the manner of steps.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

182+, for a construction which, as a whole, is stepped.

- 536 This subclass is indented under subclass 519. Structure in which a major face of one section has thereon a tongue, flange or rib, and is in face-to-face contact with the adjacent section which has a groove which closely conforms to and mates with the tongue, flange, or rib, which groove may also be formed by flanges.
- 537 This subclass is indented under subclass 536. Structures wherein the sections are made of sheet material having a full cross section uniformly deformed to provide a meshing tongue and groove.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

630, for a single panel with integral reinforcement, e.g., corrugating.

538 This subclass is indented under subclass 536. Structure wherein each of the sections has plural upstanding flanges, including sections forming a tongue or groove which mesh with each other.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 537, for a similar structure wherein entire sheets are corrugated to provide meshing sections.
- 539 This subclass is indented under subclass 519. Structure in which a tongue on an edge of one section closely conforms to and mates with a groove on an adjacent edge of the other section.

- 536+, for a surfacing of facing sections with tongue and groove on the section faces.
- 589.1+, for a module of more general application which has integral keying means.
- 540 This subclass is indented under subclass 519. Structure in which one section is formed of laminated layers, one layer of which extends

beyond the main body of material and overlaps the adjacent section.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

535, for a similar construction having plural offset portions.

541 This subclass is indented under subclass 519. Structure in which one of the sections has a portion formed by a two-walled groove at a terminal end (arris edge), which portion cooperates with a similar portion in the adjacent section in an overlapping manner.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

589.1+, for a module, e.g., block of more general application, which has integral keying means.

542 This subclass is indented under subclass 519. Structure in which one of the sections has a flange which is generally perpendicular to the plane of its exposed face, which flange engages a similar flange or opposed face on the adjacent section overlapping it.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

536+, for overlapping facing sections with face-to-face preformed closely mated tongue and groove joints.

588.1, for a structure formed by coplanar facers with interfitted lateral flanges.

593+, for a structure formed by a shaft and facers with abutting clamped flanges.

543 This subclass is indented under subclass 518. Structure having discrete means for securing the facing sections to each other or to a substructure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

520+, for another lapped multiplanar joint facing section utilizing a discrete fastener.

698, for an anchor or tie, per se, and see references under "SEARCH THIS CLASS, SUBCLASS"; for other subclasses providing for components held by a discrete dissimilar fastener.

544 This subclass is indented under subclass 543. Structure wherein the discrete securing means comprises a plurality of parts, one of which is secured to a facing section and the other of which is secured to the substructure, said parts being adapted to interengage and be connected to each other upon installation.

545 This subclass is indented under subclass 543. Structure wherein an edge of a facing section, or a strip attached thereto, is folded back upon itself and the discrete means engages, e.g., is covered by, the folded portion.

#### SEE OR SEARCH THIS CLASS, SUB-CLASS:

520+, for a structure where lapped edge interfitting sections have a fastener at the lapped juncture.

546 This subclass is indented under subclass 543. Structure in which the discrete means fits in a slot or notch extending inwardly of an edge of a facing section.

547 This subclass is indented under subclass 543. Structure in which the discrete means extends over and clamps an end or edge of a facing section.

548 This subclass is indented under subclass 547. Structure in which the discrete means is provided with a piercing point integral with it.

549 This subclass is indented under subclass 543. Structure wherein the facing section is clamped between the substructure and a member which is completely exterior of the facing, e.g., nailed strip on outside of shingle.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

489, wherein a facer panel is held laterally of a preassembled or prepositioned shaft by a separable clip type fastener.

550 This subclass is indented under subclass 543. Structure wherein (1) the discrete means encompasses at least two sides of a substructure element or (2) the discrete means and a substructure element are so constructed as to interfit.

498+, for a structure wherein a facer and shaft interfit and the shaft carries a retainer for the facer.

551 This subclass is indented under subclass 543. Structure including an elongated strip under a facing section or sections which cooperates with the securing means.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

459+, for a strip bridging facer panel.

549, for a facing section held to a substructure by a subjacent.

552 This subclass is indented under subclass 543. Structure in which the discrete means, at least in part, is integral with or permanently secured to a facing section.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

511, for a structure having attaching means fixed to a facer which is attached to a dissimilar subjacent structure.

553 This subclass is indented under subclass 518. Structure including a feature forming a space within or under a facing section or for spacing one facing section or portion thereof from another or from the supporting substructure, e.g., brace, filler or drain.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

302.1+, for a construction with a passage between its interior and the ambient and see the subclasses listed under "SEARCH THIS CLASS, SUBCLASS" for other constructions with passage forming means.

554 This subclass is indented under subclass 518. Structure in which a facing section has a feature which, when it and other sections are juxtaposed, results in a complete cover assembly which exhibits a particular pattern or configuration not produced by any one section.

555 This subclass is indented under subclass 554. Structure in which the facing section has a configuration simulating a plurality of sections.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

314, for another ornamental construction wherein an integral face simulates plural units.

557+, for a facing section having features on a surface simulating plural facing sections.

556 This subclass is indented under subclass 518. Structure in which a facing section has a metal element extending over the face and end thereof, usually to resist weathering.

#### SEE OR SEARCH THIS CLASS, SUB-CLASS:

596+, for a stone-like module with an individual coextensive preformed section.

557 This subclass is indented under subclass 518. Structure wherein a facing section has a plurality of tabs attached thereof simulating plural facing sections.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

314, for another ornamental structure wherein a single panel is formed to simulate plural units.

554+, for generally similar lapped multiplanar sections which together form a surfacing not apparent from a single section.

558 This subclass is indented under subclass 557. Structure wherein the simulating features include raised portions or grooves.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

316, for another ornamental structure having an integral relief formed on a major face.

559 This subclass is indented under subclass 557. Structure wherein the tabs or facing simulations are formed by slots which extend through the facing section.

560 This subclass is indented under subclass 518. Structure including a facing section whose thickness varies from one end to the other.

This subclass is indented under the class definition. Structure in which modules, usually bricks, are arranged in plural parallel courses each individually assembled with each set of parallel courses forming a facing so that the modules in one facing are in back-to-back relation to those in the opposed facing.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

506.01+, for a construction formed by laterally related modular and a dissimilar construction and see the subclasses listed under "SEARCH THIS CLASS, SUBCLASS" in subclass 506.01 for other constructions involving back-to-back related barrier sections.

562 This subclass is indented under subclass 561. Structure including a discrete tie means extending between the courses which tie means is of a material differing in kind from that of the modules.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

344+, particularly subclass 351 for a construction of a settable material backer fixed to a furring, joist or stud.

426, for adhesively bonded laterally related modules with a transverse tie.

698+, for an anchor or tie, per se, and see the subclasses under "SEARCH THIS CLASS, SUBCLASS" for other constructions utilizing an anchor or tie.

563 This subclass is indented under subclass 562. Structure wherein at least one of said preformed modules has an integral projection formed thereon which in use projects laterally towards an opposed course and the dissimilar material tie means engages said projection.

564 This subclass is indented under subclass 562. Structure wherein at least two of the modules of a course or superposed courses have preformed deformations in opposed faces and a part of the tie extends into the opposed deformations.

565 This subclass is indented under subclass 562. Structure wherein a portion of the tie means is embedded within at least one of the modules.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

583, for means connecting projecting, embedded elements of longitudinally abutting modules.

566 This subclass is indented under subclass 561. Structure in which the laterally related course modules are connected by a transverse unit which passes between and through the modules of a course.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

503+, for related structures which form a through passage.

567 This subclass is indented under subclass 566. Structure wherein the transverse unit has a head portion which is within the outside faces of the courses, which portion is locked to a mating configuration formed by the course modules or formed integral with a module of a course.

568 This subclass is indented under subclass 561. Structure including a member extending transversely between the parallel courses, which member is not visible at the outer faces of the courses and connects the parallel courses to each other.

#### SEE OR SEARCH THIS CLASS, SUB-CLASS:

562, for a construction utilizing a dissimilar material tie.

566, for a construction wherein a header unit passes through a course.

569 This subclass is indented under subclass 561. Structure wherein the laterally related course modules each have laterally extending projections monolithically formed thereon, said modules being arranged so that said projections are oriented in opposed relationship.

562+, for a similar construction utilizing a dissimilar material tie.

570 This subclass is indented under subclass 569. Structure wherein the projections include means which mutually engage and positively prevent separation of the modules in opposed courses.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

567, for a construction with traversing header with internal lockhead.

568, for a construction with a hidden joining member.

- 571 This subclass is indented under subclass 570. Structure including discrete additional means acting between the opposed mutually engaging projections and holding them fixed relative to each other.
- 572 This subclass is indented under subclass 569. Structure wherein portions of the opposed projections abut each other.

# 573.1 INCLUDING DESIGN FEATURE (E.G., INTEGRAL CORRUGATION, TENSION-ERS) ACCOMMODATING DIMENSIONAL VARIATION RESPONSIVE TO CHANGING CONDITIONS:

This subclass is indented under the class definition. Structure in which the static structure, or a component, has the ability to adjust depending upon atmospheric circumstances (i.e., variable temperature or humidity).

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 144+, for a construction with an exposed physical configuration for an acoustical effect.
- 167.1+, for means compensating earth transmitted forces.
- 345, 346, and 347, for means fixing a settable material backer to furring, joist, or stud, which means may allow movement.
- 393+, for a yieldable preformed separator.
- 474+, for a sheet-type section fixed to framing.

515+, for a construction with a disparate coating (e.g., grease).

This subclass is indented under the class definition. Structure including modules of identical but nonrectangular form in which alternate modules are placed in reversed position.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 473, for a louver panel having spaced parallel slats which may be reversed.
- 561+, for a construction of course modules in which major distinct portions of the modules in opposed courses are laterally related to each other, particularly subclasses 569+, for such a construction wherein the modules have opposed monolithic projections.
- 575 This subclass is indented under the class definition. Structure including a module having two opposed faces which extend in a nonparallel relationship transversely of the major surfaces of a barrier in which the module is a component, e.g., keystone block.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 270+, for a block with opposed parallel curved faces and nonparallel edge faces.
- 284+, for a corner block which may have nonparallel joint faces.
- 574, for a construction with alternating reversed identical form units.
- 576 This subclass is indented under the class definition. Structure including a module having a preformed member formed of a material closing on itself and embedded therein, thus forming a cavity within the preshape.

- 577, for an embedded type void former, per se, and see references under "SEARCH THIS CLASS, SUB-CLASS" for other subclasses relating to a construction with a void therein.
- 577 This subclass is indented under subclass 576. Structure including a thin-walled member or members defining a closed periphery, which

member in use is embedded in a settable material and forms an unoccupied void within the material.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- for a construction of vertically spaced roof sections.
- 220.1, for a service duct within a barrier.
- 302.1+, for a construction with a fluid passage communicating with an enlarged space, e.g., a hollow in a wall and see search notes.
- 320, for a cast barrier with ribs and blocks forming voids.
- 380+, for a cast in situ barrier defining an isolated space.
- 404.1+, for a nonsettable insulating material within a cavity.
- 503+, for a construction of wherein modules form a barrier with a through fluid passage.
- 553+, for a lapped multiplanar surfacing with spacing or space forming feature.
- 576, for a cavity former within a module.

This subclass is indented under the class definition. Structure including plural modular or panel units connected by means lying between their major exposed faces by (1) a discrete fastener which differs in material and shape from that of the units or (2) units with configuration on one face or edge shaped for interfitting or keying with a mating configuration on an opposed adjacent unit or (3) a unit, per se, with a feature specialized to (1) or (2).

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 415+, for facers bonded by a settable material section, e.g., brick and mortar wall which may have interfitting sections.
- 459+, for a construction utilizing a bridger strip over a panel juncture.
- 474+, for a panel interfitting with a shaft.
- 506.01+, for a construction wherein a facer is attached to a disparate structure.
- 519+, for lapped multiplanar interfitted sections forming a surface.
- 561+, for a construction of laterally related individually assembled courses.
- 574, for a construction of alternating reversed identical form modules.

- 596+, and 613+, for an opaque stone-like module or a composite panel which may include an edge feature which could be used to interengage another module but which is not critically defined for such use, particularly subclass 604 for one module usually facially related to another.
- 660+, for fabric or lattice-like open work, particularly subclass 663 for such a construction wherein annuli-members are arranged in a coplanar relationship.
- 579 This subclass is indented under subclass 578. Structure in which the modular or panel units are arranged in side-by-side relationship which members in cross-section exhibit a generally U or Z shape with the terminal flange sections aligned in parallel planes so as to form the major faces of a hollow barrier construction.
- 580 This subclass is indented under subclass 578. Structure wherein the modular or panel units are made of sheets which are located in face-to-face spaced apart relationship by members joining and forming at least two of the opposing edges of the resultant composite module and also connecting the resultant panel edgewise of an adjacent panel.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 782.1+, for a composite panel wherein its facing is spaced by edger-spacers but having no feature for edge-to-edge interkeying of adjacent panels.
- 581 This subclass is indented under subclass 578. Structure in which the panel units are grille or lattice-like panels.

- 448, for an imperforate area plaster backer having sections with interengaging edges.
- 656.8+, for cornered or peripherally bordered frame, per se.
- 660+, for a residual fabric or lattice open work.
- 782.1+, for a perforate panel with attached disparate edging.

### 582.1 With joining means of dissimilar material and separate from unit:

This subclass is indented under subclass 578. Discrete connecting feature which differs in composition from the panel, block, or tile unit.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

698+. for an anchor or tie assembled in situ.

#### 582.2 Includes lock or latch mechanism:

This subclass is indented under subclass 582.1. Dissimilar joining means with an additional securing device that (1) requires a key or (2) is yieldably biased to a particular position (e.g., closed).

### 583.1 Connecting protruding ends of units' reinforcement (e.g., rebar):

This subclass is indented under subclass 582.1. Dissimilar joining means wherein the units are fastened to each other via a jutted-out portion of embedded strengthening elements.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 432, for a construction wherein the reinforcement of a facer unit is embedded in a facer bonding section (mortar).
- 565, for a construction of laterally related modules with reinforcement embedded in them.
- 587.1, for a module with a projecting tie embedded in a unit.

#### 584.1 Clamp type:

This subclass is indented under subclass 582.1. Dissimilar joining means which is a member engaging two adjoining modules and urging one toward the other; e.g., U-shaped ties, threaded bolts, etc.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

357+, for a clip engaging a settable material receiving backer and furring, joist, or stud.

### 585.1 Tie (e.g., dowel) placed in preformed opposed openings:

This subclass is indented under subclass 582.1. Dissimilar joining means which is an elongated rigid member fitting into like, aligned, and opposed openings or depressions in units.

### 586.1 Tie along and within edge or face groove; e.g., spline:

This subclass is indented under subclass 582.1. Dissimilar joining means which is designed to fit within (1) a plurality of prefabricated openings or (2) a slot or channel in the units.

### 586.2 Spline having particular shape (bone, arrow, dovetail, etc.):

This subclass is indented under subclass 586.1. Dissimilar fitted tie which is fabricated to generally resemble a short straight section with enlarged portions of a certain configuration at both ends.

### 587.1 Protruding tying means (hook or eyebolt) embedded in unit at other end:

This subclass is indented under subclass 582.1. Dissimilar joining means in which fastening members are fixed a short distance into the unit body with a portion of the member extending outside the unit edge.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

583.1, for connecting protruding ends of unit reinforcement.

#### 588.1 Interfitted integral flange:

This subclass is indented under subclass 578. Discrete connecting feature which both has a portion that mates with a corresponding portion of the abutting unit.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 528, 529, and 542, for a construction of lapped multiplanar surfacing with interengaged flanges.
- 584.1, for a construction of units with lateral flanges clamped together.

#### 589.1 Having integral key:

This subclass is indented under subclass 578. Discrete connecting feature in which the modular panel, block, or tile unit has two portions

with at least one projection or at least one recess that are a constituent part of the entire panel, block, or tile.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 271, for a construction with spaced intersections with a key joint between a superimposed unit.
- 286, for a corner block-type module with horizontal and vertical keys.
- 436, for a cast-in-situ section bonding interengaging section of modules.
- 448, for a plaster-type imperforate area backer having interengaging edge joints.
- 474+, for a module fixed to an elongated sustainer which may conform in shape to the sustainer.
- 519+, for an interfitted, lapped, multiplanar section forming a surfacing; e.g., shingle-type.
- 561+, particularly subclasses 567 and 570 for laterally related module courses which may include mating deformations on the modules.

### 590.1 Dovetail-type key:

This subclass is indented under subclass 589.1. Integral key wherein the unit has a fan-shaped projection or indentation (e.g., mortise) that mates with an identical indentation or projection of an adjacent unit.

## 590.2 Keys, mortises, or key and mortise on opposed faces or edges:

This subclass is indented under subclass 590.1. Integral dovetail key wherein one unit has sides that are substantially parallel and said sides have: (1) at least two fan-shaped projections with at least one projection on each side or (2) at least two fan-shaped indentations with at least one indentation on each side; or (3) at least one fan-shaped indentation on one side and a fan-shaped projection on the other side.

### 590.3 Having mortise with internal space:

This subclass is indented under subclass 590.1. Integral dovetail key wherein the fan-shaped indentation is designed to accommodate both the projection and; e.g., a settable material such as grout.

### 591.1 Key on angularly related edges or faces:

This subclass is indented under subclass 589.1. Integral key wherein one unit has at least two projections that are located on two surfaces which share a common juncture plus the unit engage indentations on an adjacent unit.

## 591.2 Multiple, finite keys (e.g., perpendicular sawtooth):

This subclass is indented under subclass 591.1. Integral key on angularly related edge wherein the unit contains a plurality of projections that are a length substantially shorter than the entire length of the unit.

### 591.3 Key designed for four direction lock:

This subclass is indented under subclass 591.1. Integral key on angularly related edge wherein the unit contains a projection which prevents movement in the horizontal and vertical planes.

## 591.4 Rabbet on two perpendicular faces or edge and face (e.g., ship lap) for key:

This subclass is indented under subclass 591.1. Integral key on angularly related edge wherein the unit has a groove cut into two exposed intersecting portions that creates a projection which corresponds to a similar groove in an adjacent unit.

### 591.5 With additional locking feature (e.g., fastener):

This subclass is indented under subclass 591.4. Integral key on angularly related rabbeted edge wherein the projection includes another distinct element that ensures contact with an adjacent unit.

## 592.1 Keys, mortises, or key and mortise on opposed edges or faces:

This subclass is indented under subclass 589.1. Integral key wherein one unit has sides that are substantially parallel and said sides have: (1) at least two projections with at least one projection on each side; or (2) at least two indentations with at least one indentation on each side; or (3) at least one indentation on one side and a projection on the other side.

### 592.2 Key designed for four direction lock:

This subclass is indented under subclass 592.1. Integral key on opposed edges wherein the unit contains a projection which prevents movement in the horizontal and vertical planes.

### 592.3 In a vertical arrangement:

This subclass is indented under subclass 592.2. Integral four direction lock key on opposed edges wherein the unit is assembled in an upright position.

### 592.4 Having mortise with internal space:

This subclass is indented under subclass 592.1. Integral key on opposed edges wherein the indentation is designed to accommodate both the projection and, e.g., an internal settable material such as grout.

### 592.5 And provided for stacking:

This subclass is indented under subclass 592.4. Opposed edges having mortise with space wherein the projection and corresponding indentation are manufactured to prevent movement in the horizontal plane.

## 592.6 Designed for stacking (e.g., key on top surface, mortise on bottom):

This subclass is indented under subclass 592.1. Integral key on opposed edges wherein the projection and corresponding indentation are manufactured to prevent movement in the horizontal plane.

This subclass is indented under the class definition. Structure including a modular unit composed principally of masonry or concrete-like materials, which when assembled in juxtaposed relationship with like units forms a surface.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 578+, for a modular unit with discrete edgewise connecting feature.
- 630, 631, and 782.1+, for a panel primarily of nonstone-like material, e.g., wood, metal, plastics or glass.
- 662, for lattice-type openwork forming by annular-like members coplanarly arranged.

#### SEE OR SEARCH CLASS:

165, Heat Exchange, subclass 9.1 for a shaped module of refractory material particularly adapted to be stacked to form a heat exchange mass.

597 This subclass is indented under subclass 596. Structure in which a discrete clip, generally having a portion thereof embedded in the stone-like modular unit, grips a sheetlike facing member for the modular unit.

598 This subclass is indented under subclass 596. Structure in which a sheetlike preformed facing sheetlike member is equipped with an integral feature, e.g., flange, tongue, for making a connection between a stone-like modular unit and the facing member.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

601, for a stone-like module with edging reinforcement of a different kind of material.

782.1+, for another type of composite panel.

599 This subclass is indented under subclass 598. Structure in which the facer retaining feature is in the form of flanges on the terminal edges of the facing member.

This subclass is indented under subclass 596.

Structure in which the opaque stone-like unit has embedded therein at least one rod-like member of a different kind of material, usually steel.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

189+, for a pre-cast stair unit.

583, and 587, for a unit with embedded projecting means acting as a tie.

633+, for openwork.

740.1+, for a shaft which may be used as a concrete reinforcing.

This subclass is indented under subclass 600.
Structure in which the embedded member is an elongated member over or adjacent an edge of the module.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 254+, for a corner with a revealed embedded protector.
- 392, for a tile with integral edge engaging or spacing feature.
- 443+, for a plaster receiving backer which may be framed.
- 556, for a shingle type member with a metal face and end cover.
- 598+, for a coextensive section which grips the edges of a stone-like module.
- 782.1+, for another type of panel with a disparate edging.
- This subclass is indented under subclass 600. Structure wherein the module is thin and has one face with a continuous surface with at least two elongated ribs formed integral with and projecting outwardly of its opposed face, the width of the rib being substantially less than the width of the unit.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 248, for hoop tie engaging ribs on sections held by them.
- 319+, for a ribbed cast in situ barrier.
- 569+, for a ribbed slab arranged with their ribs in opposed relation.
- 603, for an unreinforced module with monolithic spacing projections.
- 611, for a block of generally T-shape crosssection.
- This subclass is indented under subclass 596. Structure in which the stone-like module has a plurality of integral projections thereon which act to space the major surface of the module from another or from a subsurface.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 267, for walls or spaced layers enclosing a space wall.
- 578+, for a module or panel with a feature specialized to forming an edge-to-edge connection.
- 592.5, for a module with integral mating key means providing an internal space.
- 604, for another construction formed by particularly related modules, e.g., by spacers.

- 605, for a stone-like module with grooves coextensive with, a major surface.
- 712+, for sheet or wire tires which may act as spacers.
- This subclass is indented under subclass 596.

  Structure including two or more stone-like modules which are related to each in a specifically defined relationship not provided for above.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 578+, for a panel or related panels having a feature specialized to forming an edge-to-edge relationship.
- This subclass is indented under subclass 596. Structure in which the stone-like module has a plurality of narrow elongated indentations extending across a surface thereof from one edge to another, which surface, in use, faces an adjacent module.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 437+, for a module with mortar filled channels in adjacent faces.
- 444, for a block type backer for plaster type facing in which the blocks have an integral settable material retaining feature.
- 603, for an integral spacing projection or protuberance which extends outwardly of a major surface of a stone-like module.
- 606, for a mortar gripping feature in the form of projections located within a traversing passage of a stone-like module.
- This subclass is indented under subclass 596. Structure including a module having a passage which extends completely through the module.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

503, for a barrier with a through passage and see the search notes therein for other constructions with internal passages or spacers.

#### SEE OR SEARCH CLASS:

- 138, Pipes and Tubular Conduits, appropriate subclasses for tubular wall structure, subclasses 115+ for pipes in the form of a module having plural passages and see the reference to Class 138 in the class definition of Class 52.
- This subclass is indented under subclass 606. Structure wherein the module has an additional passage or a groove extending through the unit and intersecting and cooperating with the first passage.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

505, for a combination of preshaped units forming a barrier having two-way interior passage intercommunication.

This subclass is indented under subclass 596. Structure including a module in which any through cross-section taken normal to a major face thereof defines a shape which is not a rectangle.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 245+, for a curvilinear barrier construction including a module, per se, peculiar to such construction.
- 284+, for a corner block module.
- 323, for a filler of cooperating void forming sections between a rib of a cast barrier.
- 429, for a construction having flanges on modules confining a cast-section.
- 474+, for another construction having a module fixed to an elongated sustainer which are shaped to fit the sustainer.
- 503+, for modules forming barrier with a through fluid passage.
- 510, for a module with integral seating ledge supporting a dissimilar section.
- 561+, for laterally related courses of modules which often include modules peculiarly shaped to tie the courses together.
- 574, for an alternating reversed form module.

- 575, for a module with nonparallel joint faces.
- 589.1+, for a module with integral keys.
- 602, for a ribbed slab-type reinforced cast module.
- 603, for a module with a spacing projection.
- 606, for a module with a traversing passage.
- This subclass is indented under subclass 608. Structure in which the modules have at least two outer faces lying in spaced parallel planes which faces are limited by terminal edges, at least one terminal edge of one face being offset from the proximal terminal edge of the other of said faces.
- This subclass is indented under subclass 609. Structure in which the entire peripheral silhouette of the module suggests the letter "L".
- This subclass is indented under subclass 609. Structure in which the entire peripheral silhouette of the module suggests the letter "T".
- This subclass is indented under subclass 596. Structure including an imperforate solid body comprising a stone-like unit having at least two discrete components which differ in form or material, which components are arranged in contiguous layers.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 144+, for a construction having an acoustical feature which may include diverse materials.
- 232, for a construction having a reactive component.
- 249+, and 267+, for walls with layers enclosing a space.
- 309.1+, for a structure including a synthetic resinous component.
- 311.1+, particularly subclass 315 for a module wherein an exposed layer has a particular configuration to produce an ornamental effect.
- 364, for a construction having a component with a feature specialized to receiving a penetrating fastener.
- 404.1+, for a nonsettable insulating material within a cavity.

- 408, for a structure having preformed dividing lamina of a disparate material.
- 443+, for a plaster type facing adhered to an imperforate area backer.
- 515, for a structure with a disparate material coating.
- 556, for a shingle with a metal face and end covering.
- 576, for a module with an internal void former.
- 782.1+, for a residual composite panel.

#### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclasses 411.1+ for a stock material product in the form of a plural layer web or sheet and characterized merely by the composition of the layers, and subclass 540 for a natural solid such as stone and permeated or saturated with a fluid.
- This subclass is indented under the class definition. Structure including a sheetlike substantially imperforate member having ribs, flanges, or other projections formed of the material of the member and acting to strengthen it, e.g., a corrugated sheet.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 671+, for a corrugated expanded metal sheet.
- 782.1+, for a hollow or sandwich panel with a corrugated sheet component and see notes.

### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclass 604 for metallic stock material having intersecting corrugations.
- This subclass is indented under the class definition. Structure including a laminated member bent to form a corner, one facing lamina thereof being continuous throughout the bent area.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

656.1+, for a residual cornered or peripherally bordered frame particularly subclass 658 for a bent shaft forming a corner.

#### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclasses 119+, 121+, and 174+ for a residual, structurally defined single or plural layer stock material product which may have a bent portion, and subclass 603 for metallic stock material having an L-shape.
- This subclass is indented under the class definition. Structure comprising a structure including a rigid elongated member in the form of a shaft or openwork wherein a section thereof is mounted for movement relative to another to lengthen or shorten the structure without collapse or disassembly.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 111+, for powered, movable or extensible mast assemblies.
- 645+, for an openwork having components adjustably or collapsibly connected.

#### SEE OR SEARCH CLASS:

- 212, Traversing Hoists, subclasses 230+, 264, and 267 for extensible boom structure for load-handling apparatus.
- 248, Supports, subclass 200.1 for a bracket on a extensible column mounted between opposed surfaces; and subclasses 354.1+ for an adjustable length prop or brace for an article.
- This subclass is indented under the class definition. Structure which, per se, or when resting on a supporting surface defines an area having through passages or openings even though in use such passages or openings are filled by material in which the structure may be embedded, said structure consisting of: (1) a perforated sheet (2) plural members held at spaced intervals, (3) a single elongated member shaped to define an area or (4) means spacing an elongated member from a surface, e.g., truss, frame, trellis, lattice, grating, grid, grille, screen, ring, loop, reinforcing rod spacer (often

called a rebar chair), foraminous sheet and the like.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 180, for a structure with a perforate wear surface.
- 207, for a lattice barrier with fixed and movable panels.
- 342+, for openly spaced slat type laths.
- 503+, for hollow modules forming a through passage in barrier interior.
- 581, for a structure formed by connected perforate panels.
- 606+, for a stone-like unit with traversing passage.
- 631, for a corner formed by bent laminate.
- 782.1+, for a perforate panel with separate attached edging.

#### SEE OR SEARCH CLASS:

- 4, Baths, Closets, Sinks, and Spittoons, subclass 292 for a screen specialized for use with the class type devices.
- 14, Bridges, subclasses 3+ for a bridge truss and subclass 73 for a bridge floor.
- 15, Brushing, Scrubbing, and General Cleaning, subclasses 215+ for a mat with a feature for cleaning special work and subclasses 238+ for a mat with a feature for scraping footwear.
- 29, Metal Working, subclass 897.15 for a process of making a grille.
- 34, Drying and Gas or Vapor Contact With Solids, subclasses 237+ for a tray or floor with a feature specialized to an operation for that class.
- 55, Gas Separation, particularly subclass 306, 490+, and 522 for a foraminous, solid form, gas separating media.
- 100, Presses, subclasses 295+ for a foraminous platen or pressure surface for that class.
- 126, Stoves and Furnaces, subclasses 152+ for a fuel supporting grate.
- 135, Tent, Canopy, Umbrella, or Cane, subclasses 121+ for a tent frame.
- 139, Textiles: Weaving, subclasses 383+
  for a fabric formed by interlacing
  flexible strands, particularly subclass
  425 for such a fabric with a metal
  reinforcement.

- 160, Flexible or Portable Closure, Partition, or Panel, particularly subclasses 218+ for a movably interconnected plural strip, slat or panel closure and subclasses 371+ for a framed single flexible fabric.
- 165, Heat Exchange, subclasses 9.1+ for a structure of checker bricks.
- 166, Wells, subclasses 227+ for a screen for that class.
- 182, Fire Escape, Ladder, or Scaffold, for a structure of that class, particularly subclasses 194+ for a ladder, per se.
- 209, Classifying, Separating, and Assorting Solids, subclasses 392+ for a sifting screen and subclasses 404 to 408 for a frame for such screens.
- 210, Liquid Purification or Separation, subclasses 163+ for a grate-like liquid inlet surface drain and subclasses 483+ for a supported, shaped or superimposed filter screen.
- 211, Supports: Racks, subclass 153 for a rack shelf which may be foraminous and subclass 181.1 for a residual wire rack.
- 212, Traversing Hoists, subclass 347 for a crane boom or bridge, per se, having structure peculiar to a load-handling apparatus.
- 220, Receptacles, subclasses 485+ for a wire container.
- 241, Solid Material Comminution or Disintegration, for a grate, grid, etc. comminutor of that class (241) type.
- 245, Wire Fabrics and Structure, appropriate subclass for structure for that class.
- 256, Fences, appropriate subclass for a structure for that class.
- 261, Gas and Liquid Contact Apparatus, for a foraminous structure for the function of that class particularly subclasses 100+ for a porous sheet contact device and subclass 113 for a perforated wetted baffle.
- 267, Spring Devices, subclasses 80+ for a spring panel.
- 280, Land Vehicles, subclasses 781+ for land vehicle frames.

- 343, Communications: Radio Wave Antennas, for an antenna having features of that class, particularly subclasses 866+ for loop type, subclass 896 for cage or hollow post type and subclass 897 for mesh, woven braided or multiple strip antennas.
- 362, Illumination, subclass 330 for a screen adapted to intercept, diffuse or divert projected light.
- 404, Road Structure, Process, or Apparatus, subclasses 2+ for drain structure, subclass 70 for reinforced pavement structure and subclasses 134+ for road reinforcement structure, per se.
- 428, Stock Material or Miscellaneous Articles, subclasses 116+ for a honeycomb-like layer, subclasses 175,+ 190, 193, and 196+ for a web or sheet of mechanically interengaged strands or strand-like portions, and subclasses 131+ and 596+ for apertured stock material, see also section VI, C, 3, d of the Class 428 main definition.
- 429, Chemistry: Electrical Current Producing Apparatus, Product and Process, subclass 233.
- 432, Heating, subclasses 258+ for a support structure for heat treating ceramics and subclass 261 for an openwork tray, basket or grid structure for heat treating metal.
- 442, Fabric (Woven, Knitted, or Nonwoven Textile or Cloth, etc.), subclasses 181+ and 304+ for a woven or knit fabric.
- 454, Ventilation, subclasses 284+ for an air distributing register, and particularly, subclasses 309+ for air distributing louvers.
- 634 This subclass is indented under subclass 633. Structure in which the elongated rigid structure has parts acting as elongated runners (chords) and cross members (struts) with the struts being integral with a chord.
- 635 This subclass is indented under subclass 634. Structure in which the chords and web are of the type which has been formed from a slit sheet wherein the slits are opened by pulling on the sheet to produce the final truss form.

SEE OR SEARCH THIS CLASS, SUBCLASS:

670+, for another expanded metal openwork.

- 636 This subclass is indented under subclass 634. Structure including side-by-side opposing sections, wherein each section comprises an integral chord and strut section with discrete terminal strut portions of each section united to each other.
- 637 This subclass is indented under subclass 633. Structure wherein the openwork structure includes discrete three-dimensional sections, each formed of intersecting elongated members, which are joined in vertically aligned and stacked relationship.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 632, for a shaft or openwork permanently connected for axial extension.
- 662, for openwork panels stacked face-to-face.

### SEE OR SEARCH CLASS:

- 182, Fire Escape, Ladder, or Scaffold, subclasses 178.1+ for a platform type scaffold comprising stacked sections.
- 211, Supports: Racks, subclasses 186+ and 189+ for a rack of stacked shelf or rack sections.
- 638 This subclass is indented under subclass 637. Structure wherein means spacing the elongated members includes horizontal and diagonal braces connected to the elongated members adjacent the joined ends of the sections.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 652.1, for other three-dimensional openwork with inclined ties or struts.
- 639 This subclass is indented under subclass 633. Structure comprising a truss formed by (1) elongated peripheral members (chords) which meet at a vertex, are connected by a base member and have at least one subsidiary member extending from the base to an adjacent peripheral member or (2) a curved peripheral member

terminating at or running generally parallel to an elongated base member.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

82, for a conical or radially ribbed roof.

84, for structures that have an airfoil section.

90.1+, for an inclined cover or rafter with supporting substructures in which the rafter portion is usually a peaked truss.

#### SEE OR SEARCH CLASS:

14, Bridges, subclasses 3+ for a bridge truss.

640 This subclass is indented under subclass 639. Structure provided with means to change the deflection or convexity of the peripheral member of the truss.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

632, for an axially extensible openwork.

641 This subclass is indented under subclass 639. Structure having an arrangement of components or mating configurations on components specialized to enabling collapsing or disconnecting the component.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

127.1+, for a structure with adjunctive means useful only in assembly or disassembly of the structure, e.g., an access opening.

- This subclass is indented under subclass 639. Structure in which one or more of the members include coextensive components in face-to-face contacting relationship.
- This subclass is indented under subclass 639. Structure comprising a structural relationship among a plurality of distinct trusses.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

637+, 645+, and 648.1+, for other structurally related trusses, i.e., three-dimensional openwork.

This subclass is indented under subclass 639. Structure wherein one of the elongated peripheral members is longitudinally curved.

645 This subclass is indented under subclass 633.

Structure having means for allowing movement of the elongated members forming the openwork so as to merely adjust one member with respect to the other or to allow movement for collapse without disconnecting them.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 111+, for a mechanically operated, extensible or relatively movable mast assembly
- 632, for a shaft or openwork construction which is axially extensible without disassembly or collapsibility.
- 641, for a collapsible or demountable peaked or curved truss.

This subclass is indented under subclass 645. Structure in which the three or more planes defined by corner chords of the collapsible openwork define a three-dimensional space.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

637, 643, and 648.1+, for another three-dimensional openwork structure.

647 This subclass is indented under subclass 633. Structure in which a wire-like member is attached in spaced relationship to a flange of a flange-web (I or I beam type) member usually to serve as embedded means tying concrete to the flange-web member.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 231, for means tensioning embedded reinforcement held between sustainers.
- 334, for a ribbed concrete barrier with a shear resister between concrete and a metal beam.
- 348+, for settable material backer frame formed by intersecting or crossing members.
- 414, for cast in situ barrier having a sustainer and embedded reinforcement.

### 648.1 Three-dimensional space-defining:

This subclass is indented under subclass 633. Structure so constructed that planes intersecting at a terminal corner of, and defined by, all outer longitudinal edges of the structure define an enclosed space.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 90.1+, for an inclined rafter on supporting substructure.
- 111+, for a mast with powered motive means.
- 632, for an axially extensible shaft or openwork.
- 637+, for longitudinally superimposed three-dimensional units.
- 643, for a construction of structurally related or curved or peaked trusses.
- 662, for a stack of plural facially contacting openwork fabrics or lattices.

#### SEE OR SEARCH CLASS:

- 182, Fire Escape, Ladder, or Scaffold, appropriate subclasses, particularly subclasses 194+ for a stair without a riser and subclasses 128, 141+, and 222+ for a tower with a workmen's platform.
- 211, Supports: Racks, subclass 180, 181.1, and 182 for a rack of screens, wire, pipes, or bars.

#### 649.1 Reinforcement for settable material:

This subclass is indented under subclass 648.1. Subject matter which serves to add tensile strength to a substance, usually concrete, in which it is ultimately imbedded.

### 649.2 For beam, column, etc.:

This subclass is indented under subclass 649.1. Subject matter wherein the reinforced substance comprises a slender supporting structure.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

650.1+, for beam, girder, column, etc., per se.

#### 649.3 Having perimeter-surrounding element:

This subclass is indented under subclass 649.2. Structure, including distinct members defining terminal edges, or a terminal corner that delim-

its an area within the enclosed space in two directions, i.e., a complete frame surrounding an area.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 581, for an edge-to-edge connected openwork panel.
- 631, for a corner formed by laminate with bent facing section.
- 660+, for an openwork planar fabric or lattice which is indefinite as to length or width.
- 690+, for a construction formed by side-byside terminal edge shafts connected by cross members which construction is limited in depth only by the terminal shafts (e.g., a truss or ladder-like openwork).

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 578 for a metallic panel having a nonrectangular perimeter.

#### **649.4** Helical:

This subclass is indented under subclass 649.3. Subject matter wherein the perimeter-surrounding element has the configuration of a helix or spiral.

### 649.5 Collapsible:

This subclass is indented under subclass 649.4. Subject matter wherein the perimeter-surrounding element is extensible when constructed, but may be collapsed for shipping or storage purposes.

### 649.6 Additional laterally projecting means:

This subclass is indented under subclass 649.2. Subject matter wherein the reinforcing assembly for the beam or column includes a member disposed outwardly to the space defining construction and extending exteriorly of the defined space.

### 649.7 Spacer-positioner:

This subclass is indented under subclass 649.6. Structure including means projecting outwardly of the defined space functioning to space the construction from a base, casting mold, or the like.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

677, for a spacer-positioner for a single rod (e.g., a concrete rod support known in the art as a "chair").

### 649.8 Spacer-positioner:

This subclass is indented under subclass 649.1. Structure including means projecting outwardly of the defined space functioning to space the construction from a base, casting mold, or the like.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

649.7, for a spacer-positioner in a rebar lattice for a beam, girder, column, etc.

677, for a spacer-positioner for a single rod (e.g., a concrete rod support known in the art as a "chair").

### 650.1 Beam (e.g., girder, joist, etc.):

This subclass is indented under subclass 648.1. Subject matter the structure of which defines a horizontal, elongate, load supporting unit.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

649.2+, for concrete girder, etc., having rebar in a three-dimensional grid.

## 650.2 Inclined struts or ties meeting at intermediate runner:

This subclass is indented under subclass 650.1. Structure including longitudinal primary shafts (runners) connected by struts or tie members which are inclined towards the longitudinal (major) axis of the structure with the distal ends of each member of a pair being connected to spaced runners and with their adjacent ends forming an apex which is connected to an intermediate runner.

#### 650.3 Openwork deck, walkway, ceiling, etc.:

This subclass is indented under subclass 648.1. Subject matter comprising a horizontal, openwork-platform, usually supported by girders, joists, etc., or the framework supporting said subject matter.

### 651.01 Vertically oriented (e.g., tower, etc.):

This subclass is indented under subclass 648.1. Subject matter comprising a structure having imposing vertical dimensions.

## 651.02 For electrical conductor (e.g., line-pole, line-tower, etc.):

This subclass is indented under subclass 651.01. Subject matter comprising a support structure for an electrical energy transmission conductor.

#### SEE OR SEARCH CLASS:

174, Electricity: Conductors and Insulators, subclasses 45+ for both towers, poles or posts and specified conductor.

### 651.03 Internal transverse spacer for runners:

This subclass is indented under subclass 651.02. Structure including an elongated shaft (e.g., mast or beam) having longitudinally extending elements which are connected by internal, transversely disposed spacers.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

650.2, for a girder, joist, beam, etc., incorporating inclined struts or ties meeting at intermediate runner.

651.06, for a derrick incorporating inclined struts or ties meeting at intermediate runner.

## 651.04 Having perimeter-surrounding element (e.g., helical, etc.):

This subclass is indented under subclass 651.02. Structure including distinct members defining terminal edges or a terminal corner that delimits an area within the enclosed space in two directions, i.e., a complete frame surrounding an area.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 581, for an edge-to-edge connected openwork panel.
- 631, for a corner formed by laminate with bent facing section.
- 649.3+, for a settable material reinforcing structure having a perimeter-surrounding element.

660+, for an openwork planar fabric or lattice which is indefinite as to length or width.

690+, for a construction formed by side-byside terminal edge shafts connected by cross members which construction is limited in depth only by the terminal shafts (e.g., a truss or ladder-like openwork).

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 578 for a metallic panel having a nonrectangular perimeter.

## 651.05 For supporting hoisting or boring equipment (e.g., derrick, gantry):

This subclass is indented under subclass 651.01. Subject matter wherein the openwork structure is intended to be used to support hoisting or boring equipment.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

111+, for drill columns, crane booms, etc.

## 651.06 Inclined struts or ties meeting at intermediate runner:

This subclass is indented under subclass 651.05. Structure including longitudinal primary shafts (runners) connected by struts or tie members which are inclined towards the longitudinal (major) axis of the structure, with each member having a distal end connected to a runner and having its other end connected to an intermediate runner so as to form an apex with the other member at the intermediate runner.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

650.2, for a girder, joist, beam, etc., incorporating inclined struts or ties meeting at intermediate runner.

651.09, for a column, mast, etc., incorporating inclined struts or ties meeting at intermediate runner.

### 651.07 Column, mast, etc.:

This subclass is indented under subclass 651.01. Subject matter wherein the unit is a slender supporting structure or electromagnetic radiation antenna.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

300+, for a vertical structure with a cap covering the upper terminus.

### 651.08 Internal transverse spacer for runners:

This subclass is indented under subclass 651.07. Structure including an elongated shaft (e.g., mast or beam) the longitudinally extending elements of which are connected by internal, transversely disposed spacers.

## 651.09 Inclined struts or ties meeting at intermediate runner:

This subclass is indented under subclass 651.07. Structure including longitudinal primary shafts (runners) connected by struts or tie members which are inclined towards the longitudinal (major) axis of the structure, with each member having a distal end connected to a runner and having its other end connected to an intermediate runner so as to form an apex with the other member at the intermediate runner.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 650.2, for a girder, joist, beam, etc., incorporating inclined struts or ties meeting at intermediate runner.
- 651.03, for line-pole, line-tower, etc., incorporating inclined struts or ties meeting at intermediate runner.
- 651.06, for a derrick incorporating inclined struts or ties meeting at intermediate runner.

### 651.1 Scaffolding:

This subclass is indented under subclass 651.01. Subject matter comprising a plurality of similar pieces which connect together to form a temporary construction to aid in performing work on a structure, when assembled.

#### SEE OR SEARCH CLASS:

182, Fire Escape, Ladder, or Scaffold, appropriate subclasses, particularly subclass 128, 141+, and 222+ for a tower with a workmen's platform.

#### 651.11 Having perimeter-surrounding element:

This subclass is indented under subclass 648.1. Structure including distinct members defining terminal edges, or a terminal corner that delim-

its an area within the enclosed space in two directions, i.e., a complete frame surrounding an area.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 581, for an edge-to-edge connected openwork panel.
- 631, for a corner formed by laminate with bent facing section.
- 649.3+, for a caged lattice which reinforces settable material.
- 651.04, for line-pole, line-tower, etc., having a perimeter-surrounding element.
- 660+, for an openwork planar fabric or lattice which is indefinite as to the length or the width.
- 690+, for a construction formed by side-byside terminal edge shafts connected by cross members which construction is limited in depth only by the terminal shafts (e.g., a truss or ladder-like openwork).

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 578 for a metallic panel having a nonrectangular perimeter.

### 652.1 Triangular lattice:

This subclass is indented under subclass 648.1. Subject matter including three-sided, bracing modules.

#### 653.1 Framework:

This subclass is indented under subclass 648.1. Subject matter comprising elongate members that form the skeleton which limits and defines the complete utilitarian volume (i.e., for occupancy, buoyancy, fireplace, etc.) of a subunit of a structure.

(1) Note. The earth, or a separate structure, may compose one or more enclosing barriers of the volume.

### 653.2 Having tubular member:

This subclass is indented under subclass 653.1. Subject matter wherein the elongate members of the framework have a hollow cross-section.

(1) Note. Said cross-section of the member is usually, but not necessarily, circular in configuration.

## 654.1 Parallel trellises or sheets held by disparate connector:

This subclass is indented under subclass 648.1. Structure in which uniplanar trellis structures (e.g., trusses, or foraminous sheets) are held in parallel spaced relationship by connectors which differ in form or arrangement from the struts of the trellises or sheets.

### 655.1 Having specific connector, etc.:

This subclass is indented under subclass 648.1. Subject matter wherein significance is attributed to the means fastening individual members of the structure.

#### 655.2 Spheroidal:

This subclass is indented under subclass 655.1. Subject matter wherein the fastening means has a spherical configuration.

## 656.1 Outside corner or peripherally bordered (i.e., framing, etc.):

This subclass is indented under subclass 633. Structure including distinct members defining terminal edges or a terminal corner that delimits an area within the enclosed space in two directions, i.e., a complete frame surrounding an area.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 581, for an edge-to-edge connected openwork panel.
- 631, for a corner formed by laminate with bent facing section.
- 660+, for an openwork planar fabric or lattice which is indefinite as to length or width.
- 690+, for a construction formed by side-byside terminal edge shafts connected by cross members which construction is limited in depth only by the terminal shafts (e.g., a truss or ladder-like openwork).

### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 578 for a metallic panel having a nonrectangular perimeter.

#### 656.2 Portal frame or closure frame:

This subclass is indented under subclass 656.1. Subject matter comprising the framing of an opening for a structure or the framing of the barricading panel, itself, for such an opening.

#### SEE OR SEARCH CLASS:

49, Movable or Removable Closures, for closure panels mounted for movement or removal including support means for such closures having features providing for such movement or removal of a closure panel.

### 656.3 Fireproof:

This subclass is indented under subclass 656.2. Subject matter wherein the frame or associated door comprises material, or is constructed in a fashion, which specifically serves as a block to extreme heat or flame.

(1) Note. A closure or frame that is merely constructed of noncombustible material, such as metal or glass, is not considered proper for placement in this subclass.

### **656.4** For door:

This subclass is indented under subclass 656.2. Subject matter wherein the closure portal is an access-way for a person or thing.

### 656.5 For window:

This subclass is indented under subclass 656.2. Subject matter wherein the closure portal serves primarily as a passage-way for air or light.

### 656.6 Metal sash or frame:

This subclass is indented under subclass 656.5. Subject matter wherein the components comprising the structure are made of metal.

## 656.7 For screen or storm door or window or shutter, etc.:

This subclass is indented under subclass 656.2. Subject matter wherein the framed unit is an auxiliary closure.

### 656.8 Grille-type insert:

This subclass is indented under subclass 656.1. Subject matter wherein the framed unit is, itself, openwork, such as a grid or grate.

#### 656.9 Joint, connector:

This subclass is indented under subclass 656.1. Subject matter wherein the individual members comprising the frame elements are held together by a significant fastening means.

657 This subclass is indented under subclass 656.1. Structure including crossing diagonal members traversing the quadrilateral area and attached to at least two of the shafts or means such as a gusset plate bracing a corner.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

693+, for two spaced parallel shafts with diagonal bracing.

This subclass is indented under subclass 656.1. Structure in which at least one of the corners is formed by a bent single piece.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

631, for a laminate with a bent facing section.

659 This subclass is indented under subclass 633. Structure including a group of members which are free to move with respect to each other but which in use are disposed in an embedding mass in intermeshing or intersecting relationship.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

663, for a fabric or lattice type openwork wherein members are fixedly related to other members surrounding them.

560 This subclass is indented under subclass 633. Structure including means forming a surface of indeterminate dimensions and having a repetitive pattern of openings formed by (1) a single foraminous sheet, (2) elongated intersecting members or (3) members connecting each other, e.g., rods, circles, polygons, etc., which are coplanarly arranged.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

633, for miscellaneous openwork and see search notes therein for additional

subclasses and other classes involving openwork structures.

690+, for connected side-by-side shafts forming longitudinal edges, i.e., those which have a defined means forming the terminal edges in the manner of a ladder.

### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 596 for apertured metallic stock material.

561 This subclass is indented under subclass 660. Structure wherein the member is a perforated sheet and has filaments, e.g., wire or mesh, attached thereto usually to promote adherence to concrete.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

454, for an imperforate area plaster backer with an attached filament or mesh.

647, for a wire connected to "T" or "T" type member.

This subclass is indented under subclass 660. Structure in which plural and distinct surface forming means are arranged in a stacked facially contacting relationship.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

654.1, for a construction formed by parallel trellises held by a disparate connection.

This subclass is indented under subclass 660. Structure in which there is at least one separate member surrounded by other members, i.e., components such as squares, triangles or circles arranged side-by-side to form a planar surface.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

302.1+, for structures having a vent from the interior thereof to the ambient and see search notes for other constructions having a passage from its interior to the ambient.

606+, for a masonry module having a through passage a plurality of which

may be arranged to form an openwork.

This subclass is indented under subclass 660.

Structure comprising a first set of elongated elements extending generally parallel to each other in one direction, and a second set of elongated elements extending generally parallel to each other in a direction to meet or cross the elements of the first set.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

633, for miscellaneous openwork and see the search notes therein.

565 This subclass is indented under subclass 664. Structure in which the elements of the sets cross each other and there are separate connectors at plural crossings which hold the elements together.

This subclass is indented under subclass 664. Structure including sets of relatively thin, flat, elongated members arranged in parallel relationship with their major faces opposed and spaced and their terminal edges coplanar.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

473, for a louvered panel, i.e., connected spaced inclined slats and see notes.

#### SEE OR SEARCH CLASS:

160, Flexible or Portable Closure, Partition, or Panel, subclasses 130+ for plural strips, slat or panel type having relatively movable components.

This subclass is indented under subclass 666. Structure in which a slat passes through a closed periphery opening in another slat, the latter intersecting or crossing the first slat.

This subclass is indented under subclass 666.
Structure in which at least one first slat has a depth wise slot extending from an edge thereof, which slot receives another slat which crosses the first.

This subclass is indented under subclass 664. Structure in which the shape of transverse cross-sections of one set of elements at a point taken approximately centrally between two

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adjacent elements of the crossing set differs in kind from that of a similar cross-section of the crossing set.

670 This subclass is indented under subclass 660. Structure in which the structure is an unitary foraminous sheet formed by slitting it and opening the slits by opposed pulling forces thus forming a sheet of integral connected strips, which strips thus define openings through the sheet.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

635, for a truss with unitary chord and web of expanded metal.

### SEE OR SEARCH CLASS:

- 29, Metal Working, subclasses 6.1+ for processes and machines for forming expanded metal sheets.
- 428, Stock Material or Miscellaneous Articles, subclass 596 for expanded metal stock material.
- This subclass is indented under subclass 670. Structure in which sections of the expanded sheet are permanently displaced laterally of the plane of the original sheet.
- 572 This subclass is indented under subclass 671. Structure in which the laterally displaced sections are of open channel form, e.g., U-shaped, and are formed in strips which have not been expanded, e.g., the ribs are of imperforate metal or have substantially imperforate areas.
- This subclass is indented under subclass 660. Structure wherein the member is a perforated sheet.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

670+, for an expanded metal sheet.

### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclass 596 for perforated metallic stock material.
- This subclass is indented under subclass 673. Structure comprising continuous alternating ridges and grooves.

SEE OR SEARCH THIS CLASS, SUBCLASS:

671, for a corrugated expanded metal sheet.

783.11+, for a sandwich or hollow panel with a corrugated sheet and see search notes.

This subclass is indented under subclass 673. Structure wherein those portions of the sheet which define the perforations are disposed laterally to the general plane of the sheet, e.g., form tabs or ridges at the perforations.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

671, for expanded metal with laterally displace sections, e.g., expanded corrugated metal.

This subclass is indented under subclass 660. Structure including discrete bodies attached to a sheetlike body formed by intermeshing filaments.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

454, for an imperforate settable material receiving backer with attached filaments or mesh.

577 This subclass is indented under subclass 633. Structure including a distance defining means which (1) spaces a member from a surface, usually that of a form used to shape the plastic-to-rigid, water-settable material or (2) which spaces one elongated reinforcing member from another, e.g., reinforcing rods from each other.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

344+, for a settable material backer fixed to a furring, joist or stud, including means spacing the backer from its support.

649.7, for a cage type member with spacer positioner.

### SEE OR SEARCH CLASS:

404, Road Structure, Process, or Apparatus, subclass 135 for road reinforcement with a road chair and subclass 136 for road chair structure, per se.

This subclass is indented under subclass 677.

Structure including support means for adjusting the distance of a reinforcing member from a base.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 122.1+, for a hoist or handle means for raising or lowering a building relative to the earth or a barrier or load-bearing building component relative to another.
- This subclass is indented under subclass 677. Structure shaped to penetrate a mold or base member and having a feature which determines the depth of penetration.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 361, for a penetrating type fastener holding a settable material backer to a furring, joist or stud.
- 700, for an anchor or tie with an integral feature for penetrating a form.
- 680 This subclass is indented under subclass 679. Structure comprising a headed end opposite to a penetrating end, which headed end includes a hook-like projection integral with the shank.
- This subclass is indented under subclass 679.
  Structure including a headed, penetrating type fastener and a separate spacer or stop through which the fastener passes.
- 682 This subclass is indented under subclass 681. Structure in which the stop includes a cup, bulb or U-shaped component which the principal fastener element traverses axially.
- This subclass is indented under subclass 681. Structure in which the stop or spacer is a mass of material whose depth is substantial relative to its longitudinal and lateral dimensions.
- 684 This subclass is indented under subclass 679. Structure including a member which is moved or deformed at least in part to overlie the supported reinforcing member to positively secure it to distance defining means.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 686, 687+, and 719, for a similar device which may be simply flexed, rather than permanently deformed, to provide a friction grip.
- This subclass is indented under subclass 684. Structure particularly adapted to support crossing primary reinforcing members at their intersection.
- This subclass is indented under subclass 679.
  Structure particularly adapted to support two crossing or intersecting primary reinforcing members at the intersection thereof.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 685, for a similar device in which a portion is moved or deformed to a final position.
- This subclass is indented under subclass 679. Structure including plural seats or recesses for the reinforcement member or plural supporting feet for the distance defining means.
- 688 This subclass is indented under subclass 687. Structure in which plural units having plural feet or seats are attached to or formed by a separate elongated member at spaced intervals, e.g., a spacer-positioner spaced along a connecting rod.
- 689 This subclass is indented under subclass 687. Structure comprising a single seat for engaging a primary reinforced member, including a single seat formed by two spaced sections which cooperate to form, in effect, a single seat.
- 690 This subclass is indented under subclass 633. Structure including primary parallel longitudinal members (chords) held in spaced relationship by connecting or spacing means, the space between the primary members being void, e.g., a truss or ladder-like structure.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

634+, for parallel members having spacing means integral therein.

- 656.1+, for crossing or intersecting elongated members which form a frame enclosing an area.
- 660+, for fabric or lattice type openwork of indefinite extent.

#### SEE OR SEARCH CLASS:

- Metal Working, subclass 897.35 for process of assembling beams and girders.
- 182, Fire Escape, Ladder, or Scaffold, subclasses 194+ for similar openwork used primarily for climbing.
- 591 This subclass is indented under subclass 690. Structure wherein the chords and spacing means form a rigid framework with one chord having a web section or terminal portion inclined relative to the other chord.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

639+, for a truss which as a whole is peaked or curved.

592 This subclass is indented under subclass 690. Structure wherein the chords and webs comprise a rigid framework with a plurality of coextensively abutted members forming a chord.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 642, for a curvilinear or peaked truss with a laminated member.
- 730.1+, for a composite shaft of fully over-lapped composite sections.
- 736.2, for an intersecting elongated composite structure with an axially intersecting member.
- 693 This subclass is indented under subclass 690. Structure wherein the spacing (web) means include a member which joins a shaft at an angle other than 90°.
- This subclass is indented under subclass 693. Structure wherein the spacing means comprises a single, integral sinuous or zigzag member.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

650.1+, and 651.01+, for a three-dimensional openwork of inclined struts meeting at intermediate runners.

- 695 This subclass is indented under subclass 693.

  Structure provided with an additional web member which crosses the inclined member.
- 596 This subclass is indented under subclass 690. Structure in which the elongated members are connected to and spaced from each other by a sheet-metal strip which has been shaped to strengthen it or a sheet-metal component which is bent to form a connecting feature.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

634+, for truss with unitary chord and web, e.g., one piece sheet metal.

697 This subclass is indented under subclass 633. Device comprising an intersecting member and a brace triangularly related to a shaft and the member, e.g., a diagonally braced telephone pole and a cross arm.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

40, for a discrete support for a wire or rail on a cross-arm which may be diagonally braced.

- This subclass is indented under the class definition. Structure specialized to means anchored in a previously erected barrier or load-bearing construction which means functions to attach an external element or which is incorporated into such structures as they are erected to prevent such components from parting.
  - Note. Seach appropriate subclass above for various constructions utilizing a tie or anchor which differs in kinds from the components held, and see particularly subclasses mentioned below.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

27+, for means holding a disparate article to a building construction.

- 223.12+, for a tie compressibly stressing abutting modules.
- 248, for a hoop tie around a cylindrical barrier.
- 285.1+, for an intersection of barriers utilizing a disparate material tie.
- 295, for a concrete footing with a projecting tie.
- 344+, for a settable material, e.g., plaster, backer fixed to a furring, joist or stud.
- 364+, for a construction with a component specialized to receiving a nail or screw.
- 378+, for a cast monolith held to a dissimilar section by a tie.
- 410, for components separated by a lamina which is crossed by a tie.
- 426, and 428+, for a construction of laterally related bonded units and a tie.
- 463+, and 466+, for a construction utilizing a bridger strip and tie.
- 489.1+, for a panel held laterally of a shaft by a clip type fastener.
- 506.01+, for a residual structure wherein a facer is held to another structure differing in kind from the facer.
- 519+, and 543+, for a lapped multiplanar (shingle type) surfacing utilizing a fastener or anchor.
- 562+, for laterally related courses held by a
- 582.1+, for panels held edgewise by a dissimilar joining means.

#### SEE OR SEARCH CLASS:

- 24, Buckles, Buttons, Clasps, etc., appropriate subclasses for fasteners there provided for and of more general utility.
- 220, Receptacles, subclasses 3.3+ for wall, floor or panel mounted outlet or junction box receptacle.
- 248, Supports, appropriate subclasses, for an anchored support not specialized to building construction.
- 411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, appropriate subclasses, particularly subclasses 15+ for expanding anchors. The line with Class 411 is: Class 411 takes (1) an anchor and insert, per se, which is adapted to be positioned in a preformed opening in a base and subsequently secured

therein; (2) a base and anchor where the base or opening there is merely identified by name and where no preshaped structural modification of the walls forming the opening cooperating with surface configuration of the insert is recited; and (3) an anchor, per se, capable of being frictionally retained in a preformed opening or bonded within a base. Class 52 takes (1) an anchor and insert, per se, when there is recited specific means specialized for intimately bonding with a settable material or attachment to or locking with a subsurface member: and (2) an anchor and a structural modification of a base other than a mere opening to accommodate the base.

699 This subclass is indented under subclass 698. Structure including a feature providing securement to or support by a form against which settable material is cast.

#### SEE OR SEARCH CLASS:

- 249, Static Molds, subclass 207 for in- situ construction engineering mold adjuncts which facilitate the mold operation.
- 700 This subclass is indented under subclass 699. Structure including an integral securing means for penetrating a form member.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 361+, for penetrating means fastening settable material backer to a furring, joist or stud.
- 701 This subclass is indented under subclass 699. Structure in which the securing means for engaging the form is a separate element and projects from a socket.
- This subclass is indented under subclass 698. Structure including a leg portion extending downwardly along the face of the base structure and from the lower portion of which a cantilever seat projects for supporting the separate element, usually to support a joist from a wall.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

289, for a construction having spaced sustainers intersecting another construction, e.g., multiple joists set into a wall of which the joist anchor of this subclass is usually a part.

703 This subclass is indented under subclass 698. Structure so formed that it passes through the base structure thus revealing its opposed ends.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 223.1+, for a construction with a precompressing feature, e.g., concrete under compression applied by tie-rods.
- 353, for a tie crossing opposed backer for a settable material.
- 410, for a tie crossing dividing lamina.
- 520+, for a multiplanar lapped surface with anchor or fastener extending through a joint between sections.
- This subclass is indented under subclass 698.

  Structure including a socket forming member, i.e., one having walls or flanges defining a space open on at least one side, said space receiving the support for the separate element.
- 705 This subclass is indented under subclass 704. Structure including a helical feature on the exterior of the socket member for holding it in the base structure.
- 706 This subclass is indented under subclass 704. Structure including a rod traversing the socket and passing across it inside of the base of the socket.
- 707 This subclass is indented under subclass 704. Structure including a discrete member attached to the anchor and embedded in the base structure.
- 708 This subclass is indented under subclass 704. Structure including separate, but usually attached, wall and base members which form the socket.
- 709 This subclass is indented under subclass 704. Structure including stops against which the element held can be selectively positioned.

- 710 This subclass is indented under subclass 704. Structure including spaced parallel supporting edges defining an elongated opening across the face of the base support, i.e., rail type.
- This subclass is indented under subclass 704. Structure including an internal stop which engages a head or nut on the inserted end of the member held, which stop is in the form of (1) a separate discrete element which grips the head or nut of said member or (2) the socket sidewalls are converging or are shaped to form internal discrete portions with parts (1) or (2) holding said member intermediate the terminal ends of said socket.
- This subclass is indented under subclass 698. Structure including a connector for holding two adjacent components of a building construction from parting which connector is made of wire or nonrigid sheet material.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 357+, and 361+, for a clip or fastener specialized to holding settable material backer to a furring, joist or stud.
- 440, for a separable dissimilar joining means between modules and see the search notes in subclass 582 for other constructions utilizing ties.

#### SEE OR SEARCH CLASS:

- 428, Stock Material or Miscellaneous Articles, subclasses 544+ for indefinite-length metallic wires, etc.
- 713 This subclass is indented under subclass 712. Structure made in two distinct sections each providing means for ready assembly in connected relation.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 428, for a separable bonded tie between modules.
- 565, for a sectional tie having portions embedded within each of two laterally spaced modules.
- 583, for a module having an embedded tie joined to a similar module by separable means.

714 This subclass is indented under subclass 712. Structure including a one piece member having terminal parts one of which is of different form from the other so as to connect to or bond with materials or structural shapes of differing characteristics.

#### SEE OR SEARCH CLASS:

414, Material or Article Handling, subclasses 227+ for apparatus particularly adapted for charging or discharging a facility which comprises one or more sites for the parking of wheeled vehicles.

This subclass is indented under subclass 712.

Structure including a sheet form member having parts extending laterally of a plane section of the sheet and in opposed directions away from said plane section, which parts serve to hold the components in a fixed spatial relationship to either.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 370, for a sheetlike holder engaging opposite sides of a ground member.
- 413, for a dividing lamina with integral projections on a planar face.
- 447+, for a plaster type backer of separate sections holding a sheet form clip.
- 584, for a clamp type means joining modules.

## 716.1 IN SITU ATTACHED-TYPE CHANNEL OR TRIM STRIP (E.G., EDGING):

This subclass is indented under the class definition. Structure including a strip-like channel or trim member, which in use is attached to a preerected face of a substructure (e.g., a wall).

## SEE OR SEARCH THIS CLASS, SUBCLASS:

179, for a stair nosing.

211+, for an architrave, i.e., molding strip on wall around a door or window opening.

220.1+, for a service duct within a barrier.

241+, for a baseboard for a partition.

287.1+, for a corner type channel and trim member.

290, for a structure of baseboards and a vertical sustainer therebetween.

- 312, for an ornamental trim strip having an inlay.
- 459+, for a nonsustaining bridger strip over a juncture of panels.
- 601, for a stone-like module with a dissimilar material edging.
- 656.1+, for an open frame with a defined corner.

#### SEE OR SEARCH CLASS:

- 49, Movable or Removable Closures, subclasses 475.1+ for an in situ attached closure seal (e.g., striker gasket or weatherstrip).
- 248, Supports, subclass 345 for a scuff plate or bumper attached to an article of furniture.

### 716.2 Water-guard:

This subclass is indented under subclass 716.1. Subject matter which comprises material or is constructed in a manner such that water drainage or protection from moisture is provided.

(1) Note. Exemplary in this subclass are swimming pool copings and sink trims.

### 716.3 Upholstery trim:

This subclass is indented under subclass 716.1. Subject matter which is used as a finishing strip for the plush of furniture or a vehicle (e.g., beading)

## 716.4 With separate means attaching to substructure:

This subclass is indented under subclass 716.3. Structure including means distinct from the substructure or channel or trim strip member which means acts to fasten the member to the substructure.

#### SEE OR SEARCH CLASS:

24, Buckles, Buttons, Clasps, etc., particularly subclasses 289+ for molding fasteners, per se.

### 716.5 Vehicle trim:

This subclass is indented under subclass 716.1. Subject matter which is used as finishing on the hard surface of a vehicle (e.g., exterior or interior brightwork).

## SEE OR SEARCH THIS CLASS, SUBCLASS:

716.3, for vehicle upholstery trim.

## 716.6 Interengaging fastener and strip edges or flanges (e.g., snap-on type):

This subclass is indented under subclass 716.5. Structure including a fastener which engages either internal edges of or flanges on the channel or trim strip and attaches the latter to a substructure.

#### SEE OR SEARCH CLASS:

24, Buckles, Buttons, Clasps, etc., particularly subclasses 289+ for molding fasteners, per se.

## 716.7 Having resilient-type anchor (e.g., spring clip):

This subclass is indented under subclass 716.6. Subject matter wherein the fastener is held by a deformable retainer which is easily pressed into a hole or recess in the substructure.

### 716.8 Panel gripping channel:

This subclass is indented under subclass 716.1. Subject matter comprising a U-shaped strip which is retained over the edge of a panel by tension or friction.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

716.5, for panel gripping channel trim used in or on vehicles.

717.01, for panel gripping channel trim used with portals, especially windows.

### 717.01 Portal or closure trim:

This subclass is indented under subclass 716.1. Subject matter which comprises finishing for an opening barrier such as a door, window, or the perimeter of said opening.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

211+, for finish strip on barrier or panel for an architrave.

#### 717.02 Thermal break:

This subclass is indented under subclass 717.01. Subject matter wherein the trim functions as an insulating barrier or seal.

### 717.03 Flexible strip:

This subclass is indented under subclass 716.1. Subject matter wherein the strip includes material which is easily deformed to accommodate any geometrical configuration.

### 717.04 Multilayer composite:

This subclass is indented under subclass 716.1. Subject matter wherein the strip or channel includes laminae of different material (e.g., wood and metal).

### **717.05 Polymeric:**

This subclass is indented under subclass 716.1. Subject matter wherein the strip or channel is comprised of a synthetic plastic-like material.

#### **717.06** Metallic:

This subclass is indented under subclass 716.1. Subject matter wherein the strip or channel is comprised of metal.

### 718.01 With separate means attaching to substructure:

This subclass is indented under subclass 716.1. Structure including means distinct from the substructure or channel or trim strip member which means acts to fasten the member to the substructure.

#### SEE OR SEARCH CLASS:

24, Buckles, Buttons, Clasps, etc., particularly subclasses 289+ for molding fasteners, per se.

### 718.02 Having rigid shank-type anchor:

This subclass is indented under subclass 718.01. Subject matter wherein the fastener is a nail, rivet, screw, etc.

(1) Note. The fastener has an inflexible stem which must be driven, peened, or torqued into the substructure.

### 718.03 Having resilient-type anchor:

This subclass is indented under subclass 718.01. Subject matter wherein the fastener is a deformable retainer which is easily pressed into a hole or recess in the substructure (e.g., spring clip).

## 718.04 Interengaging fastener and strip edges or flanges (e.g., snap-on type):

This subclass is indented under subclass 718.01. Structure wherein the fastener includes means which engage either internal edges of or flanges on the channel or trim strip and attaches the latter to a substructure.

#### SEE OR SEARCH CLASS:

24, Buckles, Buttons, Clasps, etc., particularly subclasses 289+ for molding fasteners, per se.

#### 718.05 Having rigid shank-type anchor:

This subclass is indented under subclass 718.04. Subject matter wherein the fastener is a nail, rivet, screw, etc.

(1) Note. The fastener has an inflexible stem which must be driven, peened, or torqued into the substructure.

#### 718.06 Having resilient-type anchor:

This subclass is indented under subclass 718.04. Subject matter wherein the fastener is held by a deformable retainer which is easily pressed into a hole or recess in the substructure (e.g., spring clip).

### **718.07** Wire type:

This subclass is indented under subclass 718.06. Subject matter wherein the deformable member of the retainer is an extremely thin rod-like element.

719 This subclass is indented under the class definition. Structures including a connecting fastener having means engaging two crossing or intersecting primary reinforcing members and connecting the two together in that relationship, usually such an arrangement of concrete reinforcing bars.

### SEE OR SEARCH CLASS:

- 403, Joints and Connections, subclasses 346+ for a joint between crossed rods comprising interfitting rod portions and subclass 400 for a joint between crossed rods in general.
- 428, Stock Material or Miscellaneous Articles, subclass 598 for metallic stock material having a T, I, or X- shaped cross-section.

## 720.1 SHAFT (I.E., ELONGATED RIGID STRUCTURE):

This subclass is indented under the class definition. Structure including a rigid member having a limited closed periphery and which is greatly elongated relative to any lateral dimension

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 40, for shaft supporting a disparate article
- 103+, for a marker or monument.
- 108, for a reversible flexible and rigid strip-like unit.
- 146+, for a vertical structure with diagonal brace or guy extending to its base.
- 155+, for a shaft having an earth piercing feature.
- 170, for a shaft reinforcement adjacent the earth's surface.
- 223.1+, for a pre-compressed (i.e., prestressed structure).
- 296+, for a footing with a supported shaft.
- 300+, for a vertical structure with terminal cap or bearing plate.
- 364+, for a composite member with means receiving a penetrating fastener.
- 489.1+, for a shaft with a separable retainer for a facer panel.
- 633+, for an openwork structure including a tower or mast.
- 712+. for a sheet or wire tie.

#### SEE OR SEARCH CLASS:

- 256, Fences, appropriate subclass for a post with means for retaining a fence, wire, or rail.
- 280, Land Vehicles, subclasses 781+ for land vehicle frames.
- 405, Hydraulic and Earth Engineering, subclasses 231+ for elongated columnar structures (e.g., piles, piers, etc.) driven or otherwise placed in the earth for the purpose of providing a stable base for a superstructure.
- 428, Stock Material or Miscellaneous Articles, subclasses 364+ for a residual rod-like material not specialized to use as a component of an in situ erected building (e.g., poles, posts, columns, beams, reinforcing rods) and

see the notes in that subclass for other rod-like or strand-like structures.

### 720.2 Baluster type (e.g., newel post, spindle, etc.):

This subclass is indented under subclass 720.1. Structure that includes the newel post or supporting spindles of a handrail (e.g., stairway balustrade).

### 720.3 Security bar:

This subclass is indented under subclass 720.1. Subject matter wherein the shaft's structure is configured to prohibit entry or egress (e.g., to a jail cell, vault, etc.).

### 721.1 Stone-like Component (e.g., concrete, etc.):

This subclass is indented under subclass 720.1. Structure which includes as a component, stone or a settable material (e.g., concrete, plaster, asphalt, etc.).

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

223.1+, for a "prestressed" structure, often elongated concrete members.

251+, for a cast stone-like member forming an intersection.

299+, for a concrete type footing.

596+, for a stone-like module (e.g., concrete block).

730.2, for a metallic rod (e.g., concrete reinforcement).

### **721.2** Upright:

This subclass is indented under subclass 721.1. Structure wherein the longitudinal axis of the shaft is vertical when in its utilitarian position.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

726.3+, upright comprising end-to-end connected sections.

### 721.3 Sustainer:

This subclass is indented under subclass 721.2. Structure wherein the shaft is configured to resist axial force and is intended to be used as a load-bearing unit.

### 721.4 Having outer layer or shell:

This subclass is indented under subclass 721.3. Structure having an outer covering of a material or structural feature differing from that of the enclosed portion of the shaft.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 269, for a wall enclosed usable space with a pre-formed dissimilar material lining or shell.
- 423, for a similar construction wherein a module is bonded together by an internal cast in situ section.
- 736.3+, 737.4+, and 738.1, for a shaft with a dissimilar material shell or facing without a stone-like component

### 721.5 Partial sleeve or collar:

This subclass is indented under subclass 721.4. Structure including a covering which circumferentially envelopes only a portion of the longitudinal dimension of the shaft.

#### **722.1** Conduit:

This subclass is indented under subclass 721.2. Structure wherein the intended purpose of the shaft is to convey a fluid (e.g., stack, well curbing, etc.).

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

726.5, a chimney or flue comprising end-toend connected sections.

### SEE OR SEARCH CLASS:

- 138, Pipes and Tubular Conduits, subclass 177 for conduit structure, per se.
- 454, Ventilation, subclass 1 for chimneys or stacks.

### 723.1 Having shell-like outer layer:

This subclass is indented under subclass 721.2. Structure having an outer covering of a material or structural feature surrounding the shaft which differs from that of the enclosed portion of the shaft.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 269, for a wall enclosed usable space with a pre-formed dissimilar material lining or shell.
- 423, for a similar construction wherein a module is bonded together by an internal cast in situ section.
- 721.4+, for a similar construction shaped to resist transverse loading.

736.3+, 737.4+, and 738.1, for a shaft with a dissimilar material shell or facing without a stone-like component.

### 723.2 Partial sleeve (e.g., collar, etc.):

This subclass is indented under subclass 723.1. Structure including a covering which circumferentially envelopes only a portion of the longitudinal dimension of the shaft.

## 724.1 Having feature resisting transverse loading (e.g., beam):

This subclass is indented under subclass 721.1. Structure comprising an elongated, rigid construction of great length compared to its width and depth which includes a nonuniform or eccentric reinforcement, or is particularly shaped in cross-section to add rigidity and resist force applied transversely to its longitudinal axis (e.g., girder, joist, etc.).

## SEE OR SEARCH THIS CLASS, SUBCLASS:

649.2+, an array of reinforcement members for a concrete beam.

## 724.2 Tension member having attached projection:

This subclass is indented under subclass 724.1. Structure wherein the feature resisting transverse loading is a member having tensile strength, which member has attached to an end an element (e.g., shear member) interconnected by mechanical means.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

740.7, for a tension member having an attached projection.

### 724.3 Lattice-type structure:

This subclass is indented under subclass 724.1. Structure which features regular patterned spaces along the length of its physiognomy.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

650.1+, for openwork beams which are not stone-like.

### 724.4 Having arch feature:

This subclass is indented under subclass 724.1. Structure wherein the longitudinal dimension of the shaft describes an arc or the shaft has arcuate features within it (e.g., scalloped, etc.).

#### 724.5 Having outer layer or shell:

This subclass is indented under subclass 724.1. Structure having an outer covering of a material or structural feature differing from that of the enclosed portion of the shaft.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 269, for a wall enclosed usable space with a preformed dissimilar material lining or shell.
- 423, for a similar construction wherein a module is bonded together by an internal cast in situ section.
- 736.3+, 737.4+, and 738.1, for a shaft with a dissimilar material shell or facing without a stone-like component.

#### 726.1 End-to-end connected sections:

This subclass is indented under subclass 720.1. Structure wherein the shaft has more than one axially aligned section, there being a fastener or configuration at their juncture to hold them aligned.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 632, for an axially extensible shaft or openwork.
- 738.1+, for a structure of axially aligned sections held by a coextensive shell or core.

#### SEE OR SEARCH CLASS:

403, Joints and Connections, appropriate subclasses for rod-like members connected together and see the reference thereto in the class definition of this class (52). For example, this subclass takes connected shafts having features for resisting bending stress and other connected rod arrangements having features other than those merely fastening together ends of rod-like members.

- 405, Hydraulic and Earth Engineering, subclass 250 for sections of dissimilar materials and subclass 251 for a foundation pile formed of end-to-end connected sections of similar material.
- 428, Stock Material or Miscellaneous Articles, subclass 411.1 and 615+ for nonmetallic and metallic composites, respectively, defined in terms of the composition of their components.

#### 726.2 Beam:

This subclass is indented under subclass 726.1. Subject matter wherein the shaft is intended to be used, when in place, as a horizontal, elongate, load supporting unit.

### **726.3** Upright:

This subclass is indented under subclass 726.1. Subject matter wherein the longitudinal axis of the shaft is vertical when in its final position.

### 726.4 Utility pole:

This subclass is indented under subclass 726.3. Subject matter wherein its intended use is to support an electrical conduit or fixture.

### 726.5 Chimney, flue, etc.:

This subclass is indented under subclass 726.3. Upright structure which is intended to function as an outlet for a noxious gas.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

218, for a flue with gaseous fluid directing feature.

219, for flue connection to a structure.

722.1, for a stone-like conduit.

#### SEE OR SEARCH CLASS:

454, Ventilation, subclass 1 for chimney or stack structure.

### **729.1 I-beam:**

This subclass is indented under subclass 720.1. Structure including at least two flange members joined by a web member, which provide a cross-section of the shaft in the shape of an "I" or "H".

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

737.1, for a beam with a cross-section which is different from an "I" or "H".

### 729.2 Compound construction:

This subclass is indented under subclass 729.1. Structure wherein the web and flange of the shaft are comprised of separate members which are joined together or the web or flange of the shaft is comprised of plural members.

### 729.3 Corrugated web:

This subclass is indented under subclass 729.2. Subject matter wherein the shaft's web is undulant.

### 729.4 Wooden component:

This subclass is indented under subclass 729.2. Structure wherein the I-beam includes timber or a timber product.

#### 729.5 Folded sheet material:

This subclass is indented under subclass 729.1. Structure which is made from flat stock material which is bent along a fold line.

### 730.1 Longitudinally related striplike sections:

This subclass is indented under subclass 720.1. Structure including two or more elongated members extending side by side along their lengthwise dimensions.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

690+, for an openwork structure including two or more coextensive spaced members.

729, for an I-beam type shaft.

736.3+, 737.4+, and 738.1, for another shaft construction with a dissimilar shell or facing.

#### 730.2 Reinforcement for settable material:

This subclass is indented under subclass 730.1. Subject matter, wherein the longitudinal elements are intended to be imbedded in a substance, usually concrete, for the purpose of adding tensile strength.

(1) Note. These longitudinal elements are commonly known as "rebar".

## 730.3 Closure related (e.g., stile, sash bar, mullion, etc.):

This subclass is indented under subclass 730.1. Subject matter , wherein the longitudinally related strip-like sections are components of a closure frame.

### 730.4 Forms hollow enclosure (e.g., tubular):

This subclass is indented under subclass 730.3. Subject matter, wherein the cross-section of the assembly is hollow.

### 730.5 Having interlocking feature:

This subclass is indented under subclass 730.4. Subject matter, wherein each component is constructed in a fashion which permits it to be interfitted with another component for facilitation of assembly or disassembly.

## 730.6 Having angular component (e.g., having L, T, Z cross-section):

This subclass is indented under subclass 730.1. Structure wherein one or more of the elongated members have a flange running along its length.

### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 603 for metallic stock having an L-shaped cross-section.

#### 730.7 Wood:

This subclass is indented under subclass 730.1. Subject matter which comprises laminated wood.

### 731.1 Structural support:

This subclass is indented under subclass 730.1. Subject matter wherein the elongated structure is intended to support a load.

### 731.2 Forms hollow enclosure (e.g., box beam):

This subclass is indented under subclass 730.1. Structure wherein the elongated members are joined together at their longitudinal edges to form a hollow enclosure.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

648.1+, for a three dimensional space surrounding structure (e.g., box type truss, mast, etc.).

#### SEE OR SEARCH CLASS:

lar structures of more general application. Features considered suitable for Class 52 include: a tubular structure with attached features or discrete projecting portions having a rigidifying function other than merely forming or supporting the tube wall (e.g., a tube with support means for structural elements such as a beam, panel, etc., means such as ribs or defined shapes acting to resist transverse loading, open structure such as box girders, or masts, etc.).

### 731.3 Having interlocking feature:

This subclass is indented under subclass 731.2. Subject matter wherein the elongated members which form the hollow shaft are constructed so as to interfit, thereby facilitating assembly or disassembly.

### **731.4** Upright:

This subclass is indented under subclass 731.2. Subject matter wherein the longitudinal axis of the hollow shaft is vertical when in its final position.

### 731.5 Partition support (e.g., stud, furring, etc.):

This subclass is indented under subclass 731.4. Subject matter wherein the upright hollow shaft is intended to have a vertical barrier attached to it.

### 731.6 For vehicle:

This subclass is indented under subclass 731.2. Subject matter wherein the hollow shaft is intended to be used as a support in a vehicle.

#### SEE OR SEARCH CLASS:

280, Land Vehicles, subclasses 781+ for specific vehicle frame construction of a land vehicle of general utility provided with its running gear.

## 731.7 Having angular component (e.g., having L, T, Z cross-section):

This subclass is indented under subclass 730.1. Structure wherein one or more of the elongated members have a flange running along its length.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 603 for metallic stock having an L-shaped cross-section.

### **731.8** Upright:

This subclass is indented under subclass 731.7. Subject matter wherein the longitudinal axis of the elongated structure is vertical when it is in its final position.

### 731.9 Partition support (e.g., stud, furring, etc.):

This subclass is indented under subclass 731.8. Subject matter wherein the upright support is intended to have a vertical barrier attached to it.

#### 732.1 Forms hollow enclosure:

This subclass is indented under subclass 730.1. Structure in which the members are joined together at their longitudinal edges to form a hollow shaft.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

648.1+, for a three dimensional space surrounding structure (e.g., box type truss, mast, etc.).

730.4+, for closure related strips which are tubular.

731.2+, for tubular structural supports.

### SEE OR SEARCH CLASS:

lar structures of more general application. Features considered suitable for Class 52 include: a tubular structure with attached features or discrete projecting portions having a rigidifying function other than merely forming or supporting the tube wall (e.g., a tube with support means for structural elements such as a beam, panel, etc., means such as ribs or defined shapes acting to resist transverse loading, open structure such as box girders, or masts, etc.).

### 732.2 Having interlocking feature:

This subclass is indented under subclass 732.1. Subject matter wherein the elongated members which form the hollow shaft are constructed so

as to interfit, thereby facilitating assembly or disassembly.

### **732.3** Upright:

This subclass is indented under subclass 732.1. Subject matter wherein the longitudinal axis of the hollow shaft is vertical when in its final position.

#### 733.1 Ceiling hanger:

This subclass is indented under subclass 720.1. Structure wherein the shaft is intended to be located and configured to support an interior overhead panel, tile, etc.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

506.06+,a ceiling hanger combined with the element which it supports.

### 733.2 Stud, furring-strip, lath-strip, etc.:

This subclass is indented under subclass 720.1. Structure wherein the shaft is configured and intended to be used as a sustaining member for a wall panel or covering.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

731.4+, 731.9, and 732.3, for related structure comprising longitudinally related strip-like sections.

792.1+, and 793.1+, for wall panels having integrated sustaining members.

## 733.3 Having projection which is one piece with shaft:

This subclass is indented under subclass 733.2. Structure wherein the shaft includes an angularly extending portion formed by severing some of the shaft material and bending it to provide a projection.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

740.6, for a tension member (e.g., re-bar) having a projection.

### 733.4 Curtain wall joint:

This subclass is indented under subclass 733.2. Structure which is configured and intended to be used to connect abutting wall or partition panels.

### 734.1 For closure or closure portal:

This subclass is indented under subclass 720.1. Structure wherein the shaft is intended to be used as a component in a door, window, skylight, etc., or the peripheral enclosure thereof.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

656.2+, for portal or closure framing.

717.01+, for portal or closure trim strip.

730.3+, for structure comprising longitudinally related strip-like sections.

### 734.2 Window came, glazing bar, etc.:

This subclass is indented under subclass 734.1. Structure comprising a slender grooved bar whose intended purpose is to hold together the panes in a stained glass or latticework window.

#### 735.1 For vehicle:

This subclass is indented under subclass 720.1. Structure wherein the shaft is intended to be used as a component in a conveyance (e.g., automobile, truck, airplane, etc.).

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

731.6, for structural support for vehicle comprising longitudinally related strip-like sections.

### SEE OR SEARCH CLASS:

244, Aeronautics, subclasses 117+ for beams used in an aircraft structure.

280, Land Vehicles, subclasses 781+ for land vehicle frames.

### 736.1 Upright (e.g., post, pole, etc.):

This subclass is indented under subclass 720.1. Structure wherein the longitudinal axis of the shaft is vertical when in its utilitarian position and said shaft is generally considered to be free-standing.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

103+, for a marker or monument.

146+, for a vertical structure with diagonal brace or guy extending to its base.

155+, for a shaft having an earth piercing feature.

300+, for a vertical structure with terminal cap or bearing plate.

- 651.01+, for an openwork structure including a tower or mast.
- 721.2+, for an upright structure featuring a stone-like component (e.g., concrete).
- 726.3+, for an upright structure which comprises end-to-end connected sections.
- 737.1+, for load-bearing uprights.

#### SEE OR SEARCH CLASS:

256, Fences, appropriate subclass for a post with means for retaining a fence, wire or rail.

## 736.2 Having attached intersecting member (e.g., cross-arm):

This subclass is indented under subclass 736.1. Structure having connected thereto, at least one member extending at an angle to the principal axis of said structure (e.g., cross-arm).

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

651.02+, for an openwork structure having a line support.

726.4, for a utility pole constructed of endto-end sections.

### 736.3 Having shell-like outer layer:

This subclass is indented under subclass 736.1. Structure having an outer covering of a material or structural feature surrounding the shaft which differs from that of the enclosed portion of the shaft.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 269, for a wall enclosed usable space with a pre-formed dissimilar material lining or shell.
- 423, for a similar construction wherein a module is bonded together by an internal cast in situ section.
- 721.1+, for a shaft with a dissimilar material shell or facing with a stone-like component.
- 737.4+, for a similar construction shaped to resist transverse loading.

### 736.4 Partial sleeve (e.g., collar, etc.):

This subclass is indented under subclass 736.3. Structure including a covering which circumferentially envelopes only a portion of the longitudinal dimension of the shaft.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 170, for a shaft with reinforcing means defined as being related to the earth's surface.
- 721.5, and 723.2, for a concrete or stone-like shaft having a collar.

#### 737.1 Girder, column, etc.:

This subclass is indented under subclass 720.1. Structure wherein the shaft is designed to resist transverse or axial force and is intended to be used as a load-bearing unit.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 649.2+, 650.1+, and 651.07+, for three-dimensional openwork shafts.
- 721.1+, for concrete girders and columns.
- 729.1+, for girders in the shape of an "I" or "H".

## 737.2 Plural or composite having attached intersecting member:

This subclass is indented under subclass 737.1. Structure including (a) spaced elongated members or (b) a shaft which is a composite of elongated sections held in edge-to-edge relationship, said structure (a) or (b) having attached thereto at least one member extending at an angle to the principal axis of the structures or composite columns supporting a beam or girder.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 290, for opposed strips (e.g., baseboards on opposite sides of a stud.
- 633+, for openwork, a construction which delineates an open area; particularly subclasses 660+ for a fabric or lattice type open-work (e.g., grilles or grating).

### 737.3 Wood/metal composite:

This subclass is indented under subclass 737.1. Structure wherein the shaft comprises the combination of wood and metal.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

729.4, for an I-beam comprising wood and metal.

### 737.4 Having shell-like outer layer:

This subclass is indented under subclass 737.1. Structure having an outer covering of a material or structural feature differing from that of the enclosed portion of the shaft.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 269, for a wall enclosed usable space with a preformed dissimilar material lining or shell.
- 423, for a similar construction wherein a module is bonded together by an internal cast in situ section.
- 721.1+, for a shaft with a dissimilar material shell or facing with a stone-like component.

#### 737.5 Partial sleeve (e.g., collar, etc.):

This subclass is indented under subclass 737.4. Structure including a covering which circumferentially envelopes only a portion of the longitudinal dimension of the shaft.

### 737.6 Box-type, channel, or angle, cross-section:

This subclass is indented under subclass 737.1. Structure having a hollow or a C, U, or L shaped cross-section.

### 738.1 Having shell-like outer layer:

This subclass is indented under subclass 720.1. Structure having an outer covering of a material or structural feature differing from that of the enclosed portion of the shaft.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 269, for a wall enclosed usable space with a pre-formed dissimilar material lining or shell.
- 423, for a similar construction wherein a module is bonded together by an internal cast in situ section.
- 723.1+, and 724.5, for a shaft with a dissimilar material shell or facing with a stone-like component.
- 736.3+, for a free-standing shaft with a dissimilar material shell or facing with a stone-like component.
- 737.4+, for a load-bearing shaft with a dissimilar material shell or facing with a stone-like component.

#### **739.1** Strut:

This subclass is indented under subclass 720.1. Structure wherein the shaft is configured to be used as a stiffener or bracing member within or exterior to a primary shaft.

(1) Note. Struts are generally relatively short compared to other shafts in this section of subject matter.

### 740.1 Tension member (e.g., re-bar):

This subclass is indented under subclass 720.1. Structure wherein the shaft is a thin bar or rod having tensile strength and which is intended to be used to increase tensile strength of a composite construction, usually in a settable material.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

649.1+, for an openwork array or bundle of tension members.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclasses 544+ for re-bar, per se.

### 740.2 Embossed or dimpled:

This subclass is indented under subclass 740.1. Structure having node-like protuberances or depressions.

#### **740.3** Ribbed:

This subclass is indented under subclass 740.1. Structure having elongated, raised ridges or grooves.

### 740.4 Longitudinal:

This subclass is indented under subclass 740.3. Structure wherein the ridges or grooves extend parallel to the longitudinal axis of the rod.

### **740.5** Spiral:

This subclass is indented under subclass 740.3. Structure wherein the ridges wind helically about the surface of the rod.

 Note. A single spiral ridge is included here.

## 740.6 Having projection which is one piece with shaft:

This subclass is indented under subclass 740.1. Structure wherein the shaft includes an angularly extending portion formed by severing some of the shaft material and bending it to provide a projection.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 597 for metallic stock material having stuck-out projections.

### 740.7 Mechanically attached or bonded:

This subclass is indented under subclass 740.6. Structure wherein a feature resisting transverse loading is a member having tensile strength, said member having attached to an end a projection (e.g., shear member) interconnected by mechanical means.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

334, for a concrete barrier with a rib-type sustainer having shear means between the sustainer and barrier.

724.2, for a tension member with an attached projection which is imbedded in a shaft comprising a settable material.

### 740.8 Sinuous curve type:

This subclass is indented under subclass 740.1. Structure having an undulating, generally sinuous configuration.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

740.6, for an axially twisted type rod.

740.7, for a rod with attached projections.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 592 for metallic stock material which is helical or has a helical component.

### 740.9 Axially twisted:

This subclass is indented under subclass 740.1. Structure which is twisted about its longitudinal axis to present a generally helical shape or edge.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

740.8, for a sinuously curved rod.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 592 for metallic stock material which is helical or has a helical component.

#### 741.1 PROCESSES:

This subclass is indented under the class definition. Processes which are used in the construction and assembly of structures of this class and which are not provided for elsewhere.

(1) Note. Construction processes also include repair, alteration, etc.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

749.1+, for a residual machine or implement specialized to in situ building construction and see search notes for exemplary other classes providing for such apparatus.

### SEE OR SEARCH CLASS:

- 14, Bridges, subclasses 77.1+ for a process of erecting a bridge.
- 29, Metal Working, appropriate subclass, for a process not specialized to the manufacture, erection, or assembly of a building structure at the job site (e.g., erecting a wall, attaching a component to a previously erected barrier, connecting a floor to a wall, etc.) are in Class 52.
- 106, Compositions: Coating or Plastic, for a composition and a process of making it there provided for.
- 144, Woodworking, subclasses 329+ for a process of assembly or manufacture of an article having at least one wood component, not peculiar to the manufacture or erection of a building structure at the job site.
- 264, Plastic and Nonmetallic Article Shaping or Treating: Processes, appropriate subclasses, particularly 31+ for a residual process of casting settable material and see the reference to Class

- 52 in section I of the class definition and in subclass 31 and 35 thereof.
- 404, Road Structure, Process, or Apparatus, subclasses 72+ for a process of making, repairing, or maintaining a roadway.
- 428, Stock Material or Miscellaneous Articles, appropriate subclasses for a residual stock material product of single or plural layer form not elsewhere provided for; see also section IV, A, 2 of the main definition or that class (428).

#### 741.11 Requiring soil work:

This subclass is indented under subclass 741.1. Subject matter wherein manipulation of the earth at the construction site is a requisite step (e.g., trenching, digging, etc.).

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

169.1+, for a structure having a defined relationship to the earth.

#### SEE OR SEARCH CLASS:

405, Hydraulic and Earth Engineering, subclasses 132+ for subject matter relating to tunnels and tunneling; subclasses 229+ for foundations and methods and apparatus for constructing the same; and subclass 258.1 for earth control structures and earth treatment methods.

### 741.12 Container:

This subclass is indented under subclass 741.11. Subject matter wherein the construction requiring the soil work (e.g., tank, swimming pool, etc.) is intended to be used to confine a mass in storage.

#### 741.13 Wall:

This subclass is indented under subclass 741.11. Subject matter wherein the construction requiring the soil work is a vertical barrier.

### 741.14 Upright erection:

This subclass is indented under subclass 741.11. Subject matter wherein the construction requiring the soil work is a free standing vertical structure (e.g., post, pole, etc.).

### **741.15 Support:**

This subclass is indented under subclass 741.11. Subject matter wherein the construction requiring the soil work is a foundation of another structure.

### 741.2 Stair:

This subclass is indented under subclass 741.1. Subject matter wherein the process comprises a method of construction of a staircase, riser, tread, etc.

### 741.3 Protection:

This subclass is indented under subclass 741.1. Subject matter wherein the process comprises a method of treatment or construction of a unit, whereby deterioration of said unit (e.g., by fire, corrosion, etc.) is prevented or retarded.

### **741.4 Sealing:**

This subclass is indented under subclass 741.1. Subject matter wherein the process comprises a method for controlling fluid flow, heat transfer, sound transmittal, etc.

### 741.41 Cementitious surfacing:

This subclass is indented under subclass 741.4. Subject matter wherein a structure is covered with a layer of mortar or a mortar-like substance.

### 742.1 Filling preformed cavity:

This subclass is indented under subclass 741.1. Subject matter relating to filling a void such as the interior of a hollow wall with material (e.g., insulation, concrete, etc.).

### 742.11 For appliance:

This subclass is indented under subclass 742.1. Subject matter wherein the hollow wall is a component of a utility device such as an oven, refrigerator, or the like.

### 742.12 Filler is sheet material:

This subclass is indented under subclass 742.1. Subject matter wherein the filler material is of a planar configuration (e.g., insulation paper or batting, etc.).

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

793.11, and 794.1, for panels having insulation batts as a component.

#### 742.13 Filler material is flowable:

This subclass is indented under subclass 742.1. Subject matter wherein the filler is an aerated or pelletized material (e.g., insulation foam, granules, etc.).

### 742.14 Filler is cementitious (e.g., concrete, etc.):

This subclass is indented under subclass 742.13. Subject matter wherein the filler is a dense, settable material (e.g., concrete, etc.).

### 742.15 Fastening:

This subclass is indented under subclass 742.14. Subject matter wherein the filler material is intended to be used to set an anchor.

### 742.16 Grouting or pointing:

This subclass is indented under subclass 742.10. Subject matter in which a settable material is injected into a void or the exposed surface of the injected material is finished off.

### 745.01 Storage facility construction:

This subclass is indented under subclass 741.1. Subject matter wherein the process comprises a method of building a structure which is used for storage (e.g., tanks, silos, etc.).

### 745.02 Using prefabricated subenclosure:

This subclass is indented under subclass 745.2. Subject matter wherein a preassembled subenclosure or substructure section or unit (e.g., room) of a building is formed at one location and lifted or moved to a final location in a building.

### **745.03** Stacked:

This subclass is indented under subclass 745.02. Subject matter wherein a substructure section or unit is stacked on top of another one to form a multistory structure.

#### 745.04 Tower support:

This subclass is indented under subclass 745.03. Subject matter wherein a plurality of subenclosed building units are supported from a tower or framework.

#### 745.05 Barrier construction:

This subclass is indented under subclass 741.1. Subject matter wherein the process comprises a method for building a confining unit of a structure (e.g., floor, ceiling, etc.).

#### 745.06 Cover:

This subclass is indented under subclass 745.05. Subject matter wherein the barrier is commonly known as a roof.

### **745.07** Arcuate:

This subclass is indented under subclass 745.06. Subject matter wherein the barrier is curved (e.g., dome, hemicylindrical, etc.).

### 745.08 Using prefabricated unit:

This subclass is indented under subclass 745.07. Subject matter wherein the construction comprises plural elements which are preformed or preassembled, and is then moved into a final position.

#### **745.09 Vertical:**

This subclass is indented under subclass 745.05. Subject matter wherein the barrier is commonly known as a wall.

### 745.1 Using prefabricated unit:

This subclass is indented under subclass 745.09. Subject matter wherein the construction comprises plural elements which are preformed or preassembled, and is then moved into a final position.

### 745.11 Pivoted unit:

This subclass is indented under subclass 745.1. Subject matter wherein the unit is formed horizontally and tilted up, or down, into position.

#### **745.12** Support:

This subclass is indented under subclass 745.09. Subject matter wherein the process comprises a method of supporting a wall or portion thereof.

#### 745.13 Using prefabricated unit:

This subclass is indented under subclass 745.05. Subject matter wherein the construction comprises plural elements which are preformed or preassembled, and is then moved into a final position.

### 745.14 Hinged unit:

This subclass is indented under subclass 745.13. Subject matter wherein separate units are joined by hinge elements.

#### 745.15 Portal or closure construction:

This subclass is indented under subclass 741.1. Subject matter wherein the process comprises a method of construction of (a) an opening in a barrier or (b) an adjunct thereto.

### 745.16 Using prefabricated unit:

This subclass is indented under subclass 745.15. Subject matter wherein the construction comprises plural elements which are preformed or preassembled, and is then moved into a final position.

#### 745.17 Column, mast, etc., construction:

This subclass is indented under subclass 741.1. Subject matter wherein the process comprises a method for constructing a free-standing, non-residential, vertical structure.

### 745.18 Using prefabricated unit:

This subclass is indented under subclass 745.17. Subject matter wherein the construction comprises plural elements which are preformed or preassembled, and is then moved into a final position.

### 745.19 Fabrication of member, module, etc.:

This subclass is indented under subclass 741.1. Subject matter, wherein the process comprises a method of forming a structural component.

### 745.2 And moving into position:

This subclass is indented under subclass 745.19. Subject matter wherein the process comprises a method of forming a structural component from plural elements and moving said component into final position.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 122.1+, for a structure having a hoist or handle means.
- 127.1+, for a structure with an assembly for disassembly means.
- 514, for a structure with means for a split prevention or damaged part repair.

### 745.21 Anchor, bond, etc.:

This subclass is indented under subclass 741.1. Subject matter wherein the process comprises a method of uniting two or more elements or components of a structure.

### 746.1 Adhering preformed sheet-form member:

This subclass is indented under subclass 741.1. Subject matter including the step of utilizing a settable material (e.g., adhesive to attach a hidden face of a sheet or block to another type of structure).

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

390+, for a barrier with an adhered veneer tie.

408, for a structure with a preformed dividing lamina.

446, for a coated settable material backer.

515, for a residual structure including a coextensive coating of disparate material.

#### SEE OR SEARCH CLASS:

156, Adhesive Bonding and Miscellaneous Chemical Manufacture, appropriate subclass for a laminating process, per se, and see especially subclass 71 for a process of securing a lamina to a building or installed structure and see the reference to Class 52 under section "B" in the class definition and in subclass 71 of Class 156.

### 746.11 For roofing:

This subclass is indented under subclass 746.1. Subject matter wherein the sheet-form member is attached to an overhead cover.

### 746.12 Mosaic veneer:

This subclass is indented under subclass 746.1. Subject matter wherein the attached sheet comprises a tile-like decorative facing.

### 747.1 Assembling exposed modules:

This subclass is indented under subclass 741.1. Subject matter relating to assembling modules (e.g., laying bricks, building veneered walls, roofing shingles).

### SEE OR SEARCH CLASS:

29, Metal Working, subclasses 446+ for processes of assembling or joining reformed parts involving pre-stressing of at least one part.

### 747.11 Tiling:

This subclass is indented under subclass 747.1. Subject matter wherein the module is a unit of a decorative array of units of vitreous or ceramic-like material, or comprising material to resemble ceramic-like units (e.g., asphaltic floor tiles).

#### 747.12 Stone-like module:

This subclass is indented under subclass 747.1. Subject matter wherein the module is a brick, block, or panel of cementitious material (e.g., concrete).

### 747.13 Refractory:

This subclass is indented under subclass 747.12. Subject matter wherein the module includes the specificity of resistance to extreme heat or the by-products thereof (e.g., lining or construction of an oven, kiln, furnace, ladle, chimney, etc.).

## 748.1 Overlapping or interfolding edges (e.g., shingling, etc.):

This subclass is indented under subclass 747.1. Subject matter in which the edges of the assembled modules are overlapped or interfolded (e.g., shingling).

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

518, for a lapped multi-planar surfacing (e.g., a shingle roofing).

#### 748.11 Sheathing:

This subclass is indented under subclass 748.1. Subject matter wherein the modules are intended to be used as an external covering on a vertical wall of a structure (e.g., siding).

#### 749.1 MACHINE OR IMPLEMENT:

This subclass is indented under the class definition. Apparatus specialized to the assembly or manufacture of a building.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 122.1+, for a structure with a hoist or handle means.
- 127.1+, for a structure with removable construction means.
- 173.1+, for various building structures combined with an adjunctive feature (e.g.,

a wall with built-in grout injecting means).

#### SEE OR SEARCH CLASS:

- 15, Brushing, Scrubbing, and General Cleaning, appropriate subclasses for machines and implements therein provided and particularly subclass 105.5 for tool and mortar joint finisher; subclass 235.3 for mortar joint finisher; and subclass 235.4 for mason's trowel and float.
- 114, Ships, subclass 224 for ship caulking implement.
- 118, Coating Apparatus, subclasses 504+ for a work shield, mask or protector, there provided for.
- 166, Wells, appropriate subclasses for subject matter relating to wells, especially subclasses 285+ for cementing processes and subclasses 378+ for assembling processes.
- 173, Tool Driving or Impacting, subclass 90 for impacting tools.
- 224, Package and Article Carriers, subclass 44.5 for a hod.
- 239, Fluid Sprinkling, Spraying, and Diffusing, appropriate subclasses for a device which may project fluid, mortar, cement or plaster.
- 269, Work Holders, appropriate subclasses for a work holder capable of repeated use
- 401, Coating Implements With Material Supply, appropriate subclasses, particularly subclasses 261+ for a handmanipulable mortar-applying implement with material supply and a blade-like applying or spreading tool; and see section V, B, I of the class definition for Class 401 for the line between Class 401 and Class 425 which latter two classes include implements for applying plastic material
- 404, Road Structure, Process, or Apparatus, subclasses 83+ for apparatus to make, repair, or maintain a roadway.
- 405, Hydraulic and Earth Engineering, appropriate subclasses for an apparatus related to the formation of a structure for that class.

425, Plastic Article or Earthenware Shaping or Treating: Apparatus, subclass 60 for a combined depositing and shaping means mounted in a rotating boom, subclasses 63+ for a building form with dynamic repositioning means for progressive molding of a building, etc., and subclass 458 for a putty knife type shaper including means to shape plural dimensions.

#### 749.11 Tiling:

This subclass is indented under subclass 749.1. Apparatus intended to be used for the installation or repair of a mosaic facade or covering.

#### **749.12 Roofing:**

This subclass is indented under subclass 749.1. Apparatus intended to be used in the construction or repair of an overhead cover.

#### **749.13** Masonry:

This subclass is indented under subclass 749.1. Apparatus intended to be used to facilitate assembly or repair of a stone-like construction.

### 749.14 Bricklaying machine:

This subclass is indented under subclass 749.13. Apparatus intended to be used to facilitate the placement of modules in a stone-like construction.

#### 749.15 Lining:

This subclass is indented under subclass 749.13. Apparatus intended to be used to facilitate the construction or repair of the inner wall of a structure (e.g., vessel, kiln, oven, mill, etc.) with a refractory material which is resistant to extreme heat or a hostile environment.

750 This subclass is indented under the class definition. Structure not-other wise provided for.

## 761 Frame substantially cylindrical in cross-section:

This subclass is indented under subclass 474. Structure wherein the sustainer-type support is substantially cylindrical in form in a plane normal to its major axis.

# 762 Facer between framing members having unitary flanges or integral retainer for attachment to frame:

This subclass is indented under subclass 474. Structure wherein the facers have flanges which project normal to major faces of the facers and are held in opposed relation by the sustainer-type support itself or by a fastener associated therewith.

(1) Note. Included here are facers disposed in either parallel or oblique relation to each other, e.g., facer panels connected to a corner post and disposed at a 90° angle relative to each other.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

- 542, for surfacing, per se, of lapped multiplanar surfacing sections having perpendicular flanges.
- 588.1, for a surfacing, per se, of coplanar facers with interengaged flanges.

## 763 Interkeyed edge configurations of adjacent facers cooperate with shaft:

This subclass is indented under subclass 474. Structure wherein edge-to-edge related facers have interfitting edge configurations (e.g., edges of tongue and groove type, or edges oblique to major faces of the facers), which configurations cooperate with the sustainer.

(1) Note. The term "interfitting" does not require contact between the edge configurations.

## SEE OR SEARCH THIS CLASS, SUBCLASS:

578+, for plural facers with edgewise connecting features without a sustainer.

### **Facer attached between frame members:**

This subclass is indented under subclass 474. Facer with framing where a sustainer-type support completely separates two adjacent facers.

(1) Note. In some patents included in this subclass and subclasses indented thereunder a facer is secured between two members which appear to form a twopart sustainer. Classification of such patents has been made on the basis that one of the composite sustainer portions is the sustainer and the other portion is a means for retaining the facer thereon.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 127.1+, for a construction having a defined feature which is in the nature of an adjunct used for assembly and/or disassembly.
- 282.1, for a module connected by an exposed corner shaft, e.g., a divided sustainer holding facers at an angle.
- 393+, for a related construction having resilient means facially spacing a module and sustainer.
- 765, for a retainer having preassembled therewith a screw, nail, or the like which pierces a sustainer to hold the retainer thereon.

#### SEE OR SEARCH CLASS:

49, Movable or Removable Closures, subclasses 463+ for a means which releases a closure so that the closure may be physically disassociated from its supporting structure to form a passage.

### 765 Attaching device with piercing means:

This subclass is indented under subclass 764. Structure wherein the facer retaining means includes as an integral part thereof, or has preassembled therewith, a member which pierces the sustainer or the facer to attach the retaining means thereto.

### 766 Attaching means includes cam or wedge:

This subclass is indented under subclass 764. Structure wherein the facer retaining means includes a wedge or a camming means.

(1) Note. Included here as a wedge is any means, even if not tapered, which is used to wedge a facer against a sustainer, e.g., a block of wood driven into a gap between a facer and a shoulder on a sustainer to wedge the facer against another shoulder of the sustainer.

# 767 Clamped against facer by turning camengaging screw:

This subclass is indented under subclass 766. Structure including a screw which engages the surface of a cam and which, when turned, in cooperation with said cam causes a retaining element to press against the facer.

# 768 Attaching means pivots or includes pivoting actuating means:

This subclass is indented under subclass 764. Structure wherein the facer-retaining means is mounted for pivotal motion or includes a pivoting part which moves a retainer into its retaining position adjacent to the facer.

# 769 Attaching means held in position by a spring-type member:

This subclass is indented under subclass 764. Structure wherein a facer-retaining element is held in retaining position by a spring.

(1) Note. Included here is a spring which biases a retaining element against a facer and also a spring which cooperates with other holding means, such as a latch, to lock a retaining element in its retaining position.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

773+, for retainer formed of wire or thinwalled material (such as sheet metal or thin-walled metal extrusions) and biased by their own springiness against a facer to hold it on a sustainer.

# 770 Attaching means contacts facer front and back faces then is fastened to a frame member:

This subclass is indented under subclass 764. Facer between frame members wherein separate retaining members, either angularly or curvilinearly shaped, touch opposite faces of a facer, said members or one of said members being interconnected by a separate fastener, such as a screw.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

800.13+, for a door having a panel fitted into a U-shaped channel formed of separate

strips attached to an edging, the strips retaining the panel in position on the edging.

# 771 Retaining elements interconnected by intermediate member and fastener:

This subclass is indented under subclass 770. Structure including at least one separate element located between the retaining members and interconnected therewith by at least one fastener such as a screw.

# 772 Exposed attaching element holds two spaced facers to frame:

This subclass is indented under subclass 764. Facer between frame members wherein the frame and retaining element cooperate to hold gapped adjacent facers.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 282.1, for an exposed shaft at the intersection of barriers.
- 320, for a cast in situ ribbed barrier with a block-type filler between the ribs.
- 354, for a settable material receiving backer with part of a furring, joist, or stud between the edges of coplanar backers.
- 434+, for a module bonded to an internal cast in situ section including a preformed sustainer.
- 475.1, for a self supported panel attached to a frame.
- 479+, for facially opposed facer panels combined with support.

# Facer to frame attaching means resiliently biased:

This subclass is indented under subclass 764. Structure wherein the facer retaining means is formed of springy thin-walled material (e.g., sheet metal or thin-walled metal extrusions) or is made of wire, said retaining means being flexed when in its facer retaining position so as to press the facer into a predetermined position.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

204.599, for a springy strip acting as a separator between primary components.

482, for a frame member with a permanently deformable means gripping a panel.

769, for a retainer biased against a facer by a separate spring.

# 774 Attaching means in joint between adjacent facers:

This subclass is indented under subclass 773. Facer resiliently biased between frame members wherein the facer retaining means engages the face of the facer which is next to the frame.

# 775 Attaching element received in channel or aperture in frame:

This subclass is indented under subclass 764. Facer between frame members' channels wherein a portion of the facer retaining means is situated either in (1) an opening extending through the frame element, or (2) in a groove in the frame element having generally opposed sides extending from a portion thereof, thereby securing said retaining means to said frame in a facer holding position.

 Note. Included here is a retaining element received in a channel formed by a support and a separate element permanently attached thereto.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 766, for a wedge-type retaining element received in a channel or aperture in a support.
- 772, for a springy retaining element cooperating with a support shaft to hold facers in spaced end-to-end relation on said support.
- 773, for a springy retaining element formed of thin-walled material or wire and received in a channel or aperture in a support.

# 777 Facer touches frame in two planes (e.g., notched facer or frame):

This subclass is indented under subclass 474. Facer between notched frame member wherein the frame has a preformed configuration so that two surfaces of the facer, at its joint face, confront two surfaces of the frame.

#### 778 Facer rabbeted to receive frame:

This subclass is indented under subclass 777. Structure wherein a portion of the frame is situated in a rabbet formed in the facer.

### 779 Facer grooved to receive frame:

This subclass is indented under subclass 777. Structure wherein a portion of the frame is situated in a channel having generally opposed sides, in the facer.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

778, for a shaft having a portion thereof received in a rabbet formed at the intersection of barrier and joint faces of a facer, and another portion thereof received in a recess formed in the joint face of the facer.

#### 780 Frame recessed to receive facer:

This subclass is indented under subclass 777. Structure wherein the facer is held in a recess in the frame.

(1) Note. Included here is a facer abutting the horizontally extending flange portion of a beam having the cross-sectional shape of a T.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

779, for a frame having on one side thereof a protrusion which interfits in a recess formed in an edge of a facer, and having on an opposite side thereof a recess in which an edge of a facer is received.

# 781 Frame member fabricated from thin-walled material:

This subclass is indented under subclass 780. Structure wherein the frame member is made of thin-walled material either angularly or curvilinearly shaped (e.g., an I-beam, the vertical web and horizontal flanges of which are relatively thin compared to their width, or sustainers formed of sheet metal or thin-walled metal extrusions).

### 781.3 Additional stiffener between facer and frame:

This subclass is indented under subclass 474. Structure including a stiffening or reinforcing member engaging spaced sustainers and extending transversely thereto with the stiffener spacing the facing from the sustainer.

- 238.1, for a vertical partition secured to a transverse barrier.
- 321, for a barrier with projecting rib-type sustainer and a transverse retainer.

### 781.5 Preformed concrete frame:

This subclass is indented under subclass 474. Structure in which the sustainer is of concrete and is preformed before use at the job site.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

319+, for a cast in situ ribbed barrier with a preformed, settable material sustainer.

# 782.1 COMPOSITE PREFABRICATED PANEL INCLUDING ADJUNCTIVE MEANS:

This subclass is indented under the class definition. Structure comprising a prefabricated panel (i.e., a member which is very thin relative to its width and length) which includes (a) a separate mechanical fastener (e.g., a nail, bolt, screw, etc.) securing components of the panel together; or (b) a mechanical structure facilitating securement of the panel to a separate support (e.g., a flange or an aperture at a panel edge for receiving a nail; or (c) multiple plies and a disparate, elongated edging or stiffener which extends outwardly of a major or edge face of the panel; or (d) a single ply and a disparate, elongated edging or edge face of the panel; or (e) spaced sheets having in-turned opposed flanges forming an edge of the panel.

(1) Note. The combination of an adhesive fastening means and a mechanical fastening means with a composite panel is classified in Class 52, subclasses 782.1+.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 202+, auxiliary imperforate panel-like member attached to main panel, barrier, or frame.
- 208, for a panel clamped or sealed to a barrier wherein the panel is often of the "safety glass" sandwich type.
- 404.1+, for an insulating insert in a preconstructed barrier cavity.
- 443+, for a settable material facing adhered to imperforate area backer.

- 455+, sectioned imperforate facing within peripheral frame (e.g., plural panel door).
- 474+, for a panel held by a pre-positioned frame or shaft.
- 506.01+, facer attachable to disparate structure.
- 514, stiffened for split prevention in panels.
- 515+, for coated means specialized to use as a component of a static building construction.
- 556, for a shingle with a metal face and end covering.
- 576, for a cavity former within a module.
- 578+, for a panel with discrete edgewise connecting feature.
- 596+, for a stone-like module with a preformed dissimilar attached facing or edging; particularly subclass 612 for a layered module.
- 630, imperforate panel with integral reinforcing.
- 633+, openwork panels (e.g., grill, screen, or frame).
- 716.1+, in situ attached-type channel or trim strip (e.g., edging).

### SEE OR SEARCH CLASS:

- 29, Metal Working, subclass 897.32 for a metallic stock material product in the form of a web or sheet of indeterminate length or width. A patent for a product in the form of a web, sheet, or panel generally employed as a portion of a building structure and including specific structure to facilitate (a) securing thereof to a support, (b) attaching a facing to a core by an applied mechanical fastener or mating configuration, or (c) edge-to-edge mating with an adjacent unit will be placed in Class 52.
- 49, Movable or Removable Closures, subclasses 501+ for a composite panel having means particularly adapting it for use as a closure (e.g., lock).
- 428, Stock Material or Miscellaneous Articles, appropriate subclasses for a stock material product of single or plural layer form which is non-rigid or, if rigid, has no mechanical fastener or interfitting means for forming a structural combination between its

components or with an adjacent unit or mounting structure.

#### 782.11 Railroad car door:

This subclass is indented under subclass 782.1. Structure that is intended to be used as a component of a closure for a railroad car.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

783.12+, for a corrugated door.

798.1, for a corrugated or embossed panel.

### 782.2 Rimmed furniture top formed of face-toface sheets:

This subclass is indented under subclass 782.1. Structure including an edging trim strip-like member positioned against the edge face of a panel securing a covering member to a horizontally positioned sheet-like furniture top member.

### SEE OR SEARCH CLASS:

108, Horizontally Supported Planar Surfaces, subclass 27 for a table with a peripheral guard.

### 782.21 Game table top:

This subclass is indented under subclass 782.2. Structure which is portable, or easily carried and having a removable top, or the property of being collapsible (e.g., card table, camping table, etc.).

#### SEE OR SEARCH CLASS:

273, Amusement Devices: Games, subclass 309 for a game board or table which may have an edge flange.

### 782.22 Including flexible top sheet:

This subclass is indented under subclass 782.2. Structure comprising a top covering of material such as linoleum, fabric, leather, or the like.

# 782.23 With mechanical fastener for securing the rim:

This subclass is indented under subclass 782.22. Structure including a mechanical fastener (e.g., screw, bolt, or nail-type, etc.) which secures the edging trim strip-like member to the panel.

### 782.24 With mechanical fastener for securing the rim:

This subclass is indented under subclass 782.2. Structure including a mechanical fastener (e.g., screw, bolt, or nail-type, etc.) which secures the edging trim strip-like member to the panel.

# 783.1 Sandwich or hollow with sheet-like facing members:

This subclass is indented under subclass 782.1. Structure including sheet-like members, either separate or joined at an edge thereof, disposed on either side of a core (e.g., honeycomb, sheet-like member, spacers, etc.) or void.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 171.1+, for a residual transparent panel with treating means therefor (e.g., double pane window sash with drying means).
- 202+, for auxiliary panel attached to a main panel (e.g., storm sash to a window frame).
- 302.1+, for a structure with a drain from its interior to the ambient (e.g., double panel window with a vent).
- 393+, for a structure with a resilient separator yieldably resisting movement of facing elements toward each other.
- 408+, for a disparate material lamina separating components of an in situ construction.
- 506.1+, for a removable facer panel attachable to a pre-erected or assembled dissimilar substructure (e.g., a rigid upholstery panel to an automobile body).
- 612, for an opaque stone-like module of layered components.
- 730.4+, for tubular stiles, sash bars, etc.
- 731.2+, for a hollow beam, or column, etc., formed of connected strips.
- 732.1+, for a non supporting hollow enclosure (e.g., post).

### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclasses 116+ for honeycomblike articles and subclass 223 for an article having a plurality of layers or components connected by a separate and distinct mechanical connecting member extending over the edges of

or into a plurality of layers or components.

442, Fabric (Woven, Knitted, or Nonwoven Textile or Cloth, etc.), subclasses 181+ and 304+ for a woven or knit fabric.

### 783.11 Corrugated component:

This subclass is indented under subclass 783.1. Structure wherein at least one member is formed of a uniform cross-section providing alternating ridges and grooves on its opposed faces.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

537, for lapped corrugated sheets.

630, for a residual corrugated panel.

671+, and 674, for a corrugated perforated sheet.

798.1, for a corrugated sheet with separate attached edging or stiffener.

#### 783.12 For door or door shutter:

This subclass is indented under subclass 783.11. Structure that is intended to be used as a component of a closure for an entrance or egress.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

784.1, for a noncorrugated door panel.

### SEE OR SEARCH CLASS:

49, Movable or Removable Closures, for doors, per se.

### 783.13 Fire resistant:

This subclass is indented under subclass 783.12. Structure which is specifically designed to retard flame or the transfer of extreme heat caused by flame.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

784.13, for a noncorrugated fire door panel.

### 783.14 Juxtaposed corrugated sheets:

This subclass is indented under subclass 783.11. Structure including two corrugated sheet-like members positioned in facing relationship.

(1) Note. It is not necessary for the sheetlike members to contact each other for placement in this subclass.

### 783.15 Abutting trough to crest:

This subclass is indented under subclass 783.14. Structure in which the juxtaposed sheets are in contacting relationship via the trough of a first sheet-like member and the crest of a second sheet-like member.

### 783.16 Angled abutting corrugations:

This subclass is indented under subclass 783.15. Structure in which the axis of the corrugations of one sheet-like member is in a non-parallel relationship with the axis of a second sheet-like member.

#### 783.17 Corrugated intermediate sheet:

This subclass is indented under subclass 783.11. Structure including a corrugated sheet is positioned between two additional sheet-like elements to form a sandwich panel unit.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

537, for lapped corrugated sheets.

630, for a residual corrugated panel.

671+, and 674, for corrugated perforated sheets.

798.1, for a corrugated sheet with separate attached edging or stiffener.

#### 783.18 Core of elongated, corrugated spacers:

This subclass is indented under subclass 783.11. Structure in which a core is formed of a plurality of corrugated strips which are greatly elongated relative to their width.

SEE OR SEARCH THIS CLASS, SUBCLASS:

793.1+, for a multicellular core formed of a plurality of spaced, elongated strip-like members.

### 783.19 Corrugated sheet and flat sheet juxtaposed:

This subclass is indented under subclass 783.11. Structure in which a two-ply panel is formed having a first corrugated sheet-like member in face-to-face confrontation with a second substantially flat sheet member.

#### 784.1 For door or door shutter:

This subclass is indented under subclass 783.1. Structure that is intended to be used as a component of a closure for an entrance or egress.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

800.13+, for a door or shutter having a Ushaped channel overlapping panel edge and major faces.

### 784.11 Fire resistant:

This subclass is indented under subclass 784.1. Structure which is specifically designed to retard flame or the transfer of extreme heat caused by flame.

SEE OR SEARCH THIS CLASS, SUBCLASS:

783.13, for a corrugated panel for a fireproof door.

784.15, for a door which is merely insulated.

# 784.12 In-turned opposed flanges form edge of door panel:

This subclass is indented under subclass 784.11. Structure wherein each of the facing sheets has an integral edge flange, the free end of which is directed toward the opposite sheet, the flanges of the sheets being opposed to one another (e.g., opposed pan-like members).

# 784.13 In-turned opposed flanges form edge of door:

This subclass is indented under subclass 784.10. Structure wherein each of the facing sheets has an integral edge flange, the free end of which is directed toward the opposite sheet, the flanges of the sheets being opposed to one another (e.g., opposed pan-like members).

#### 784.14 Multicellular core:

This subclass is indented under subclass 784.1. Structure in which the panel core member is formed having a plurality of completely enclosed chambers.

### 784.15 Insulating core:

This subclass is indented under subclass 784.1. Structure in which a core of material that resists transfer of sound, heat or vibration is located between two sheet-like components.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

404.1+, for an insulating insert (e.g., filler in cavity in preconstructed or cast structure).

784.11+, for a fire resistant door.

791.1, for a panel having an insulating core of a woven material.

### 784.16 Having a single hollow cavity:

This subclass is indented under subclass 784.1. Structure in which a solitary, unfilled, completely enclosed chamber is formed within the door panel.

#### **785.1** Mirror:

This subclass is indented under subclass 783.1. Structure in which one of the facing sheet-like members includes a glass or polished substance that form a true likeness by reflection.

#### SEE OR SEARCH CLASS:

- 248, Supports, subclasses 466+ for supports for mirrors.
- 312, Supports: Cabinet Structure, subclasses 224+ for mirrors combined with cabinet structure.
- 359, Optics: Systems (Including Communication) and Elements, subclasses 838+ for mirrors, per se.

### 785.11 Portable (e.g., hand-held):

This subclass is indented under subclass 785.1. Structure which is designed to be easily held in the human hand.

### SEE OR SEARCH CLASS:

132, Toilet, subclasses 102+ for a brushtype mirror, subclasses 301+ for a compact mirror, and subclasses 316+ for toilet kits having a mirror.

#### **785.12** For vehicle:

This subclass is indented under subclass 785.1. Structure that is intended to be affixed onto some part of a vehicle.

# 786.1 Parallel, transparent panes (e.g., double glass window panel, etc.):

This subclass is indented under subclass 783.1. Structure including at least two facing sheet-like members which are previous to light without intended diffusion.

- (1) Note. See the search notes below for references to other subclasses which may include a transparent, or translucent sandwich-type panel.
- (2) Note. A pane is defined as a glass-like panel.

783.1, see the search notes of this subclass (783.1) for other subclasses which may include a transparent, or translucent sandwich-type panel.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclass 34 for light transmissive sheets with gas space therebetween and edge sealed; subclass 38 for a mass transmitting light through layers thereof and having an opaque border; and subclass 46 for a "two dimensionally sectional" layer having a transparent or translucent layer or section.

# 786.11 Intermediate non-glass sheet-like component:

This subclass is indented under subclass 786.1. Structure in which the parallel transparent panes include a third sheet-like member between the panes which is formed of a nonglass material and is also transparent (e.g., plastic, etc.).

### **786.12** For vehicle:

This subclass is indented under subclass 786.11. Subject matter which is used in the structure of a conveyance (e.g., automobile, airplane, etc.).

#### 786.13 Internal spacer:

This subclass is indented under subclass 786.1. Structure including a spacer member located between a pair of spaced, parallel transparent panes and positioned entirely within the boundary formed by the peripheral edge faces of the panes.

# 787.1 Having internal receiver for elongated lateral fastener:

This subclass is indented under subclass 783.1. Structure wherein the panel has an internal bushing or elongated member receiving a screw or penetrating-type fastener which extends outwardly from a major face of the panel.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

364+, for a construction specially formed to receive a screw or nail (i.e., other than a mere hole or threaded hole).

#### 787.11 Sound or heat resistant:

This subclass is indented under subclass 787.1. Structure which is insulated to prevent the transfer of acoustical or thermal energy.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

783.13, and 784.11+, for a fireproof door.

784.15, for an insulated door.

794.1, for other panels having an insulating core.

#### **787.12** For vehicle:

This subclass is indented under subclass 787.1. Subject matter which is used in the structure of a conveyance (e.g., automobile, airplane, etc.).

# 788.1 Hermetically sealed, opaque or translucent panel:

This subclass is indented under subclass 783.10. Structure which includes a perfectly closed or airtight panel formed of a pair of spaced sheet-like, non-transparent members.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

786.1+, for parallel transparent panes (i.e., double glass panel, which may be hermetically sealed).

### 789.1 Dimpled or Embossed Sheet:

This subclass is indented under subclass 783.1. Structure which includes a sheet-like member having slight depressions or indentations in the surface of the member or having bosses, protuberances, or reliefs in the surface of the member other than that of a continuous corrugation.

783.11+, for sheet-like members which are corrugated.

### 790.1 Internal, diagonal, elongated stiffener:

This subclass is indented under subclass 783.1. Structure which includes an elongated strengthening member located between two spaced sheet-like members and positioned at an oblique angle to at least one panel edge face plane.

### 791.1 Perforate or Woven Sheet:

This subclass is indented under subclass 783.1. Structure including at least one sheet-like member formed of a pre-formed foraminous surfacing or of a fabric-type surface of interlaced strands.

SEE OR SEARCH THIS CLASS, SUBCLASS:

633+, for an openwork panel (e.g., grill, screen, or frame).

799.1+, for a perforate sheet with a separate attached edging or stiffener.

### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclasses 131+ for a structurally defined web or sheet which includes an aperture.

#### 792.1 In-turned opposed flanges form panel edge:

This subclass is indented under subclass 783.1. Structure in which a fastening means (e.g., nail, screw, or bolt) is used to secure the opposed flanges in a fixed relationship.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

784.12, for a fireproof door having in-turned opposed flanges forming panel edge.

784.13, for a door having in-turned opposed flanges forming panel edge.

### 792.11 Flanges interfit:

This subclass is indented under subclass 792.1. Structure in which the opposed flanges lockingly interengage in a folded or recessed manner.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

784.12, for a fireproof door having lockingly interengaged flanges.

784.13, for a door structure having lockingly interengaged flanges.

### 793.1 Multicellular core:

This subclass is indented under subclass 783.1. Structure in which the panel core member is formed having a plurality of completely enclosed chambers.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

784.14, for a door having a multicellular core. 794.1, for a panel having a multicellular core that is filled with insulation.

# 793.11 Elongated strip-like laterally spaced elements form core:

This subclass is indented under subclass 793.1. Structure in which the multicellular core is formed of a plurality of laterally spaced strips which have a length substantially greater than their width and thickness.

SEE OR SEARCH THIS CLASS, SUBCLASS:

799.11+, for a perforate panel formed of elongated laterally spaced strips.

### 794.1 Insulating core:

This subclass is indented under subclass 783.1. Structure in which a core of material that resists transfer of sound, heat, or vibration is located between two sheet-like components.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

404.1+, for an insulating insert (e.g., filler in cavity in preconstructed or cast structure).

733.2+, especially subclass 733.4 for joined wall panels that are insulated.

784.11+, for a fireproof door.

784.15, for a door having an insulating core.

791.1, for a panel having an insulating core of a woven material.

793.1, for an insulated panel having a multicellular core.

### 795.1 Having a single hollow cavity:

This subclass is indented under subclass 783.1. Structure in which a solitary, unfilled, completely enclosed chamber is formed within the panel.

SEE OR SEARCH THIS CLASS, SUBCLASS:

784.16, for a door having a single hollow cavity.

### 796.1 Face-to-face sheets in substantially continuous contact:

This subclass is indented under subclass 782.1. Structure including a sheet having an individual coextensive discrete section disposed in substantially continuous face-to-face contacting relationship with another sheet (e.g., faces in contact).

SEE OR SEARCH THIS CLASS, SUB-CLASS:

783.1+, for sandwich or hollow modules or panels.

#### 796.11 For furniture top:

This subclass is indented under subclass 796.1. Structure that is intended to be used as a furniture top (e.g., desktop, tabletop, etc.).

SEE OR SEARCH THIS CLASS, SUBCLASS:

782.2+, for a rimmed furniture top formed of face-to-face sheets.

# 796.12 Having separate attached, elongated edging or stiffener:

This subclass is indented under subclass 796.11. Structure which includes an elongated edging member applied over the edge face of the face-to-face sheets or includes an elongated stiffening member secured to at least one of the sheet-like members.

### 797.1 Having separate attached, elongated edging or stiffener:

This subclass is indented under subclass 796.1. Structure which includes an elongated edging member applied over the edge face of the face-to-face sheets or includes an elongated stiffening member secured to at least one of the sheet-like members.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 782.2+, for a rimmed tabletop of face-to-face sheets.
- 798.1, for a corrugated or embossed sheet with separate attached edging or stiff-
- 799.1+, for a perforate sheet with separate attached edging or stiffening.
- 800.1+, for a panel with separate attached, elongated edging or stiffening.

# 798.1 Corrugated or embossed panel having separate attached, elongated edging or stiffener:

This subclass is indented under subclass 782.1. Structure in which a single sheet having corrugations or patterned deformations (e.g., ridges, grooves, dimples, etc.) is bounded with an attached, elongate perimeter component or stiffener.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

782.11, for above structure used in a railroad car door.

# 799.1 Perforate panel having separate attached, elongated edging:

This subclass is indented under subclass 782.1. Structure in which a foraminous sheet is bounded with an attached, elongate perimeter component or stiffener.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 782.2+, for a rimmed furniture top of face-to-face sheets.
- 798.1, for a corrugated or embossed sheet with separate attached, elongated edging or stiffening.
- 800.1+, for a panel with separate attached, elongated edging or stiffening.

# 799.11 Elongated, laterally spaced strips or strands:

This subclass is indented under subclass 799.1. Structure in which the foraminous sheet is formed of thin, elongate elements which are spaced laterally from each other with their elongate axes substantially parallel.

793.11, for a sandwich or hollow panel having a multicellular core formed of elongated strip-like laterally spaced elements.

### 799.12 Intersecting strips or strands:

This subclass is indented under subclass 799.11. Structure in which the foraminous sheet is formed of a first set of elongated elements extending generally parallel to each other in one direction, and a second set of elongated elements extending parallel to each other in a direction to meet or cross the elements of the first set.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

664+, for intersecting strips or strands in an openwork structure.

# 799.13 Strip having orifice encompassing intersecting strip:

This subclass is indented under subclass 799.12. Structure in which a slat passes through a closed periphery opening in another slat, the latter intersecting or crossing the first slat.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

667, for an openwork structure comprising intersecting strips or strands and including a slat which is encompassed within an orifice in another slat.

### 799.14 Strip interfits edge slot of intersecting strip:

This subclass is indented under subclass 799.12. Structure in which at least one first slat has a depth-wise slot extending from an edge thereof, which slot receives another slat which crosses the first slat.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

668, for intersecting strips or strands having interfitted edge slots in an openwork structure.

### 800.1 Having separate attached, elongated edging or stiffener:

This subclass is indented under subclass 782.1. Structure wherein a disparate elongated element forms an edging for a panel edge face or wherein an elongated stiffener forms a stiffener for a panel edge face or stiffens a major face of the panel.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 474+, for a panel assembled to a previously positioned, elongated sustainer member.
- 514, for a sustainer with a stiffener for split prevention.
- 656.1+, for openwork structure which merely defines an open work area (e.g., a frame, per se).
- 782.2, 796.12, 797.1, 798.1, and 799.1+, for a related panel with an edging.

### 800.11 Overlaps panel edge face and panel major face:

This subclass is indented under subclass 800.1. Structure in which the edging or stiffener laps or extends over the panel edge face and at least one major face of the panel, but not necessarily in contacting relationship.

# 800.12 U-shaped channel overlaps panel edge and major faces:

This subclass is indented under subclass 800.11. Structure in which the edging or stiffener member is U-shaped in cross section and laps or extends over an edge face and both major faces of the panel, but not necessarily in contacting relationship.

#### 800.13 Closure:

This subclass is indented under subclass 800.12. Structure that is intended to be used as a component in a door, window, or the like.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

656.2+, for a closure frame.

717.01+, for a closure trim strip. 730.3+, longitudinally related strip-like sections for a closure.

734.2, for a window came.

### 800.14 Having transparent or translucent panel:

This subclass is indented under subclass 800.13. Structure in which a substantial area of the panel is a pane.

### 800.15 Separate strips form U-shaped channel:

This subclass is indented under subclass 800.14. Structure wherein said U-shaped edging or stiffening member is formed of plural members.

# 800.16 Having mechanical fastener (e.g., nail, bolt, screw, etc.) for securing channel:

This subclass is indented under subclass 800.15. Structure in which a mechanical fastener (e.g., nail, bolt, screw, etc.) is used to secure the U-shaped elongate edging or stiffener to the panel.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

782.1, for a composite panel having a core sandwiched between outer layers at least one of which is not a thin sheet (e.g., a panel formed of layers of blocks or boards having a core sandwiched therebetween).

### 800.17 Separate strips form U-shaped channel:

This subclass is indented under subclass 800.13. Structure wherein said U-shaped edging or stiffening member is formed of plural members.

# 800.18 Having mechanical fastener (e.g., nail, bolt, screw, etc.) for securing channel:

This subclass is indented under subclass 800.12. Structure in which a mechanical fastener (e.g., nail, bolt, screw, etc.) is used to secure the U-shaped elongate edging or stiffener to the panel.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

782.1, for a composite panel having a core sandwiched between outer layers at least one of which is not a thin sheet (e.g., a panel formed of layers of blocks or boards having a core sandwiched therebetween).

### 801.1 Overlaps major face only:

This subclass is indented under subclass 800.1. Structure in which the elongate edging or stiffener overlaps solely the major face of the panel.

### 801.11 Spaced inwardly of edge face:

This subclass is indented under subclass 801.1. Structure wherein the stiffening member is spaced inwardly from a plane formed by the panel edge face.

#### **801.12** Closure:

This subclass is indented under subclass 801.11. Structure that is intended to be used as a component in a door, window, or the like.

### 802.1 Overlaps edge face only:

This subclass is indented under subclass 800.1. Structure in which the elongated edging or stiffening member overlaps the edge face, only, of the panel.

### 802.11 Extends laterally of edge:

This subclass is indented under subclass 802.1. Structure in which the elongated edging or stiffening member extends outwardly of a major face of the panel.

#### CROSS-REFERENCE ART COLLECTIONS

# 900 Hazardous material permeation prevention (e.g., radon):

A collection of documents relating to shielding, ducting, venting, or otherwise controlling the flow or migration of dangerous substances, emanating from the surrounding earth, into an enclosed habitat such as the basement of a building.

(1) Note. This collection is intended to provide a locus for formation regarding the control of the several varied gases which have been identified as being health hazards; an example which is considered to be illustrative, but not limiting, is radioactive radon gas; also included are any organic toxic waste fumes which have been linked to ill health.

169+, for vapor barriers, drains, and other structures designed to insulate and prevent the flow of water into a basement.

**END**